Bird Notes

VOL. II.

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BIRD NOTES.

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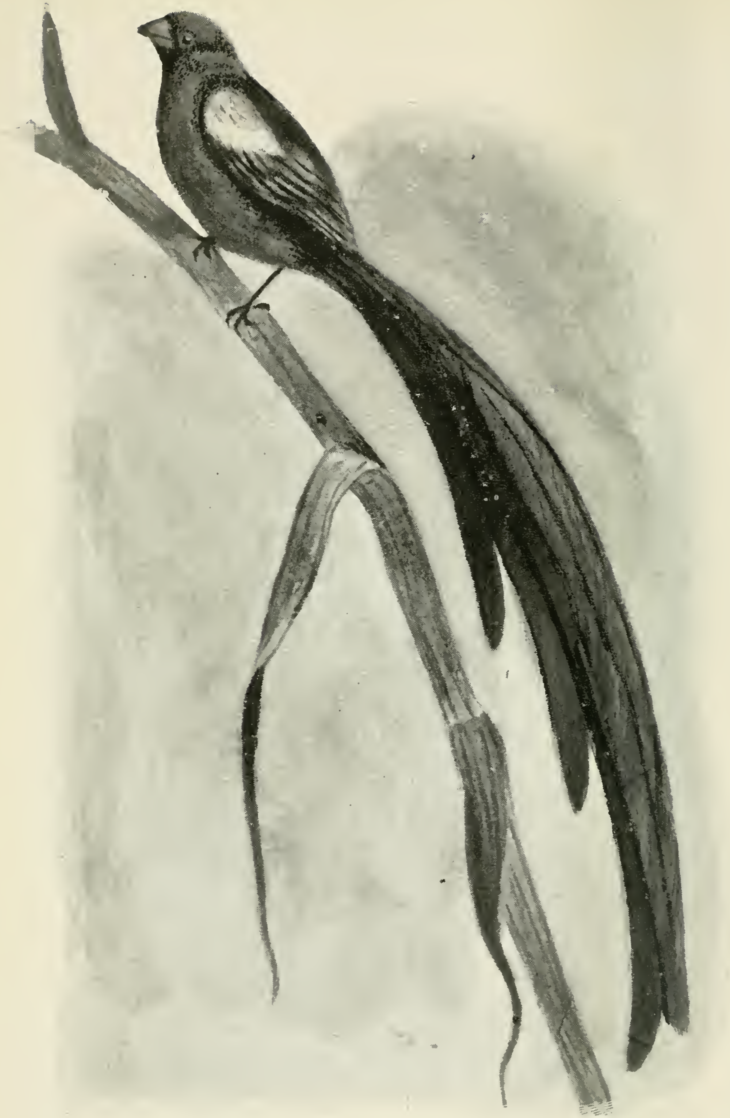

The Long-tailed Whydah.

(Chera procne).

From a drawing by Miss ELEANOR BROOKSBANK.

Bird Notes.

The Long-tailed Whydah.

By Randolph Quin.

This handsome South African Whydah, *Chera procne*, is described by Dr. Butler as follows:—"When in colour the male bird is glossy black, the underparts having the appearance of watered silk: a large patch of brilliant scarlet covers the lesser wing-coverts, the medium coverts being yellowish white, the greater coverts and flights edged with white or pale brown, but the primaries only near the end of the outer web: the legs and beak are dull red, iris brown. Length, including the tail, usually averaging 19½ inches, though specimens sometimes occur in which the tail alone attains a length of 18 inches; probably only in very old birds." This description, together with the excellent drawing by Miss Brooksbank, here reproduced, should enable the reader to form a good idea of the bird.

The female, and the male in winter plumage, present the sparrow-like appearance of Whydahs out of colour.

In its native land this species is known by various names, such as Kaffir King, Kaffir Chief, Kaffir Fink, Sackabuller, and Long-tailed Widow-bird. It is called at the Zoo the "Long-tailed *Weaver*-bird," and I have met with the names "Brown-shouldered Whydah," and "Twelve-tailed Whydah," (the last rather a good one.)

A few Long-tailed Whydahs were imported about ten years ago, and some were sold by the late Mr. Abrahams at high prices. One or two were exhibited at shows. They received an example at the Zoo in 1870, and another in 1891. I do not remember seeing the bird since 1894 or 1895.*

Though a very handsome bird, it is not very well suited for either cage or aviary. Like all Whydahs it is timid, and apt to dash madly about, and its large size makes its wild flutterings more dangerous to itself and other birds than are those of the smaller species.

It is a common and striking species in all the South African Colonies. Its great tail renders it almost unable to fly in very wet or windy weather, and it can then be caught without much difficulty.

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* There was a specimen in the Western Aviary at the Zoological Gardens last summer. See Vol. I., page 251.—J. A. S.

British Birds and their Hybrids at the Crystal Palace.

By Geo. E. Weston.

At the great show the worthy Secretary of the N. B. B. & M. C. invited me to give my impressions of the British and Hybrid sections. Knowing the risk involved in so doing, I think it very uncharitable of him to button-hole me for such a task. Unfortunately, however, in what I feel was a weak moment, I consented—so here goes.

In the first place, be it said, it was to me—a non-exhibiting, though none the less keen, fancier—a far from unadulterated pleasure to contemplate some of the decisions of the judges. There will always be difference of opinion, and it is as well there should be, for the uncertainty due to its existence is one of the charms of exhibiting. And a good fancier, even though his own bird is beaten in a struggle where it *might* have won, does not mind much so long as there is something about the winner which justifies its position. But when we see, at this show of shows, winners of premier honours with feathers either missing or ragged, or lacking all bloom and condition, it makes one almost groan aloud. Again, that burning question " to colour-feed or not to colour-feed " was dealt with in a very unsatisfactory manner —in one class non-fed birds beat otherwise superior colour-fed birds, and in another the pepper-fed ones had it at the expense of equally good natural coloured specimens; both under the same judge, too! When the arbiter of our fate doesn't know his own mind, what are we exhibitors to do?

With the exception of the judge, the Hybrid section introduced us to few genuine novelties. The reputed Chaffinch-Canary reminded one strongly of the exhibits in the German Roller class, and a self-coloured hen Canary I certainly think it to be. Mr. Colton's Chaffinch-Greenfinch, or Greenfinch-Bramblefinch, or something-or-other, was a bit more of a puzzle, though careful scrutiny failed to reveal other than a Goldfinch-Canary curiously mis-marked with patches of black feathers—troubled, doubtless, with some form of melanosis. The much-discussed cinnamon Canary-Bullfinch made its bow to a Palace audience; the first of a long series let us hope, for it is a truly delightful bird. Mr. Lambert Brown has evidently seen fit to "right-about-face" his opinion concerning the parentage of these birds, for we remember him as a vehement opponent of their right to their present appellation. This gentleman is to be congratulated on awards that gave general satisfaction. In two or three cases individual opinions favoured other birds for premier honours; but even the cognoscenti most interested admitted the merit of the declared winners. Personally I took serious exception to one award only—the winning dark Linnet-Canary—and this, as it is at direct variance with the opinions of far more competent judges, must be taken simply for what it is worth. This cinnamon-coloured specimen seemed to me to win only because it was rare-feathered. The cinnamon Canary-Bullie, probably the best all-round specimen of its cross for shape, contour, and size, gets but the second award, and rightly so too, as it obviously lacks, owing to its colour, the correct fancy properties possessed by the winner. But this cinnamon Linnet-Canary, (not near the size of some of its competitors, and lacking almost entirely the verve and go so characteristic of its variety, besides suffering under the same disabilities as the cinnamon Canary - Bullie as regards the correct fancy properties), is adjudged the winner, and a really typical specimen, for colour shape and polish a picture, is relegated to second position. Why?

Coming to the British Birds, the Goldfinches and Bullfinches were excellently well judged, but, with the exception of the winning Bullie, were a somewhat disappointing lot. What a falling off from the winners of some five seasons ago. Really the lack of lustre on the plumage of the Goldfinches was most marked. Many good birds, too, appeared fagged out, hopelessly sick of life, and it is pretty safe to predict a plentiful crop of casualties 'twixt now and the autumn. The Chaffinches introduced us to a winner minus primary flights in the right wing! The winning Linnets, too, were steady and of good size shape and feather, it is true, but as devoid of polish as an unglazed flower pot, short of markings, and of weak, washed-out colour. Lower down in the class, and among the unnoticed rabble, were birds of good size and type, richly nutty-brown in colour, and well-polished and pencilled—which is one of those things past comprehension. In both these classes I thought the Land o' Cakes had very hard lines indeed. In the next class, restricted to the Lesser Redpoll and Twite, we find a freshly-imported Mealy Redpoll, as big as a bucket, placed second, while a little gem of a genuine Lesser has to be content with fourth. In Siskins the judge pegs back the colour-fed, and clearly superior (bar the feed), specimens, among the commended cards. In the Greenfinches, on the contrary, the winners, with perhaps a single exception, were palpably colour-fed; some of those singled out for notice so much so that, though unbiassed on the matter, I considered them positively unsightly. Yet there were some really fine unfed Greenies in the class. One of Roberts and Laing's unnoticed pair was very unlucky indeed. In Bramblefinches, too, the why and wherefore of the winner were hard to see—certainly a large one, and steady, but with a broken crescent of breast colour, and badly ditched in neck feather. The second, beautifully feathered and polished, might easily have scored, though there were some rattling birds in the commended cards once again. Last year's winning Hawfinch again came out on top, in fresh hands this time, and I think him unbeatable except in point of size. The grand old champion Yellowhammer, too, once more demonstrated his superiority, and except that he has developed "leggings" in his old age, looks as well as when I first saw him—is it five or six years ago? The A. O. S. Bunting class contained some champions; a marvellous Corn Bunting, but handicapped by being badly staged. The winning Lark, by virtue of its immense size, scored easily, though some sweet exhibits followed. An old form and voice, I believe, greeted me in the Robin class, as sprightly and full of music as ever. I don't like to see a Robin in a cage, though. The melancholy sadness of the exquisite song seems accentuated, and chills me as though the little singer were voicing his regrets of happier days, alas! long past.

The Blackbird, the Song Thrush, the Starling, and the Magpie, etc. classes were a veritable triumph for condition and perfection of plumage; birds excelling in these qualities scoring in many instances over birds that, considered technically, were, perhaps, better specimens. This was strikingly exemplified in the Song Thrush class. The second prize winner struck me as a real marvel, quite one of the best ever seen for massive build, bold carriage, and regularity of mooning, and yet, apart from his frayed outer wing-flights, he was well-beaten by polish and condition alone.

The rare-feathered exhibits, too, on the whole, were in poor feather and condition, though the winners themselves were excellent; in fact, had I been allowed my choice of the whole section I think I should have carried the Albino Yellowhammer home—it is a curiously captivating bird. The Insectivorous and Migratory classes saw a well-known name once again to the fore with grand exhibits faultlessly staged, but contained nothing new—a very nice Pied Flycatcher, however, was somewhat of a rarity, at least in a cage. A wonderful little Jenny Wren, excelling in colour and condition, must have gone very close to winning in one class. A lovely specimen of the Bohemian Waxwing was staged hereabouts, whether in its correct class I know not, as, for the moment, I am unable to lay hands on my catalogue. If not wrongly entered, however, I fail to see why it was passed unnoticed. A strikingly beautiful bird, and in fine condition—I admired it immensely. In the A.O.V. migratory class it certainly deserved a place.

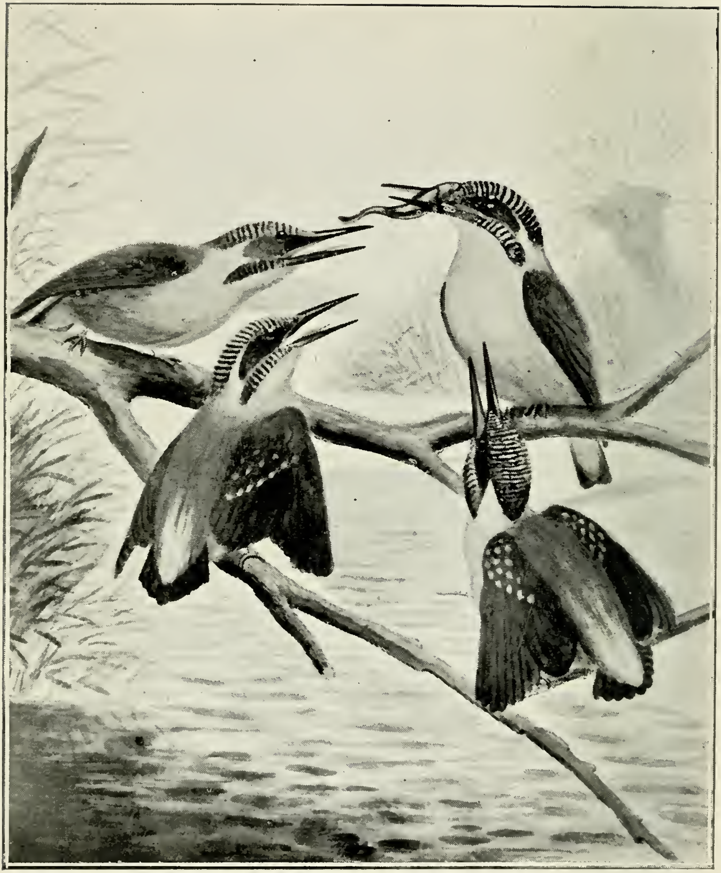
It was pleasing to note the great improvements made in the staging of the British Birds and their Hybrids. A few years ago and there were but a few pioneers in the art of artistically staging a British Bird. Now the great majority of exhibitors have followed in their footsteps, and smashed up their old dirty cages. The small minority that remain will have to follow suit—they will never win until they do.

The Kingfisher.

By J. H. Cullen.

A bird very properly excluded from the N.B.B. and M.C's. list of British Cage Birds, is the subject of this paper, the Kingfisher; which, as Mr. Frostick says in his booklet, is "painted with nature's glorious tints that no human hand could approach." Poor little fellow! because he is dressed in gorgeous array he is hunted and hounded from pillar to post, even to his death. By whom? By some lazy pot hunter, whose only object is slaughter and to have his poor little inanimate carcass stuffed, and set up in a glass case in the most unnatural style, or perhaps sold to some ignorant curiosity-monger for a shilling. What harm does he do? He simply lives on a few little fish that are of no service to man as food, although some of my gamekeeper friends, whose duty it is to watch trout streams, think otherwise. The trout generally hatch out about the same time as the Kingfisher is rearing its young, viz., in the month of May or June. I have always tried my best to convince those men of the error of their ways, and sought to persuade them that it is wrong to destroy such beautiful creatures simply because they take a few little trout, that are preserved, not for a staple article of food for mankind in general, but for the occasional sport of a favoured few; at the same time pointing out that the all ruling power, divine providence, has provided an abundance of food for all His creatures, as well as sports without wilful destruction.

My arguments have not been without result, for I am proud to say that one of my gamekeeper friends, after candidly admitting that the fishing was not made much use of by the proprietor, and owning that he had



Kingfishers.

(*Meal time*).

From the original sketch by E. F. Bailey.

(By special permission of Mr. W. H. Vale).

To face page 9.

shot many merely for people to stuff, promised never again to point his gun at the poor little Kingfisher.

Two word pictures I will paint as witnessed by myself. My point of 'vantage is a large hawthorn bush on the banks of a silvery stream. Resting there in the cool shade, after a long round or naturalising walk, about thirty yards in front of me, looking up stream, is a pole or lug (as it is called in this district) stretched across the stream to prevent the cattle from wading through the water and getting into other pastures. As the banks are about six feet high, at intervals the ground is sloped out in order to allow the cattle to get to the water for drinking. I have not sat there many minutes when along flashes his royal highness the Kingfisher, who, coming up stream, takes his stand upon the pole, and settles himself down for business after a preliminary plume of his feathers. He is facing me, looking down stream with head bent down. He sits motionless for some little time. I turn my head, and on looking back he has vanished. The eddying waters tell their own tale. Another moment and up he comes, flashing in the sunlight, like a beautiful emerald with pearls and diamonds dropping from him. He has been successful in his plunge, as the struggling fish, held crosswise in his long powerful bill, testifies. It is probably a small roach, as there are no trout in this part of the stream. A few vigorous strokes on the pole, from side to side, in order to stun or kill his prey, two forward movements of his head, the first of which turns the fish from crosswise to lengthwise in his bill, and the second sends it down his throat. He sits as before, motionless, waiting for the next fish to come along. I make a move to resume my journey, he sees me as I emerge from the shelter of the bush, and takes himself off up stream uttering his wild screeching "Chee, chee, chee," and is soon lost to sight.

On another occasion, walking on the banks of the same stream, about a mile from the above-mentioned spot, what is it I can see on the large root of an ash tree, growing on the banks? (The floods and storms have washed the bank away, leaving the root exposed some distance from the bank). What is it that I see? Five little inanimate emerald balls of fluffy feathers, some with their heads pulled well down between their shoulders, as it were, some with their bills turned under their wings. Five young Kingfishers, not long out of the nest, waiting to be fed, having a nap. As the bank slopes, I lay myself down so that can I see the root, for there is no friendly bush to form a point of 'vantage for observation. This time I have to be cautious, and I have not long to wait before I hear "Chee, chee, chee," coming down the stream: the five little inanimate balls of emerald fluff hear it also—they are all alive now, looking round and uttering their nest call, a note like pronouncing the syllable, "Zip, zip, zip," in a hoarse guttural tone. They are all life and activity now, mouths wide open and wings shaking. Only one is fed, but a moment or two later the other parent arrives, and another is fed. Down goes the fish with a gulp. In the course of about half-an-hour two more are fed. I raise my head and cough. I am detected, and away the lot goes up stream, both the parents and little ones being soon lost to sight. This spot would be about five or six hundred yards from the nesting place.

There are some of the many peeps of nature that it has been my delight and privilege to witness, all through being a country bumpkin, fond of rambling in woodland and moorland, and by streams.

(To be continued).

The Sorrows of Birds.

By Margaret Williams.

In no cheerful spirit can most lovers of Gouldian Finches review the past progress of their fancy for these lovely birds. There is hardly a more engaging, or more brightly beautiful little being to be found than this, with the yolk-of-egg waistcoat, the lilac-purple tippet, and cherry-red or velvet-black toupet, and the wife a paler shadow of his own glory, clothed in feather like a sunset flush. But all the ills that beset other foreign cage birds seem to press with extra severity upon the poor little Australian Rainbow, and one or two he has, besides, all to himself. That cancerous growth about the beak that Gouldian admirers know so well, and the terrible egg-binding that besets the poor tiny hens—how fatal and how frequent!

I speak with feeling, having just lost a hen that had had several sets of eggs in safety, and now, after nearly three years, is dead in the usual grievous way. A large cage all to themselves, no crowding with other birds, rock salt to peck, crushed egg shell, lawn grass seed in mixture, white and spray millet, and canary seed, kept the small couple in perfection of health and plumage since the spring of 1900, but though the hen laid eggs freely in their cocoanut husk, they never hatched anything.

Whether these small birds feel much or not, is a question still undecided. Mentally, I think they do not; physically, I hope they do not. The whole soul of the cock, in the case of my pair of Goulds, seemed to be in the frequent nests his hen started. When, after being absent to undergo treatment for her final illness, she was returned to the cage, he showed no pleasure at her return, but attacked her, scolding fiercely at her dereliction of duty, and driving her to the cocoanut.

Now, a widower, he eats and sleeps well, but is anxious and uneasy about the renewed failure of his project. Of actual acute pain I believe small birds feel little. They will allow their lesions to be touched, anointed, and bathed, in a placid way that would be impossible to a creature feeling, as. for example, a dog would. And the dog would patiently bear in silence what would wring cries from any human being, no matter how stoical. The doctors say it is a matter of anticipation.

The restless misery of a Goldfinch in one of those horribly-invented bell-shaped wire cages that are painted in gaudy colours and sold to poor people by oilshops, always seems to me to be the extreme of what a bird can suffer. In these cages, and in others not quite so evil in shape or material, but still perfectly unsuitable, there is no to and fro hop, so essential, apparently, to any bird's caged content. Monotony, which would be the crazing torment to us, does not seem to distress birds, witness the way in which the Canary, after a fly, returns to the prison which, if it were an Archbishop, or even a plain mortal, it would about as willingly revisit as would that unfortunate historical gentleman of the Church who was once hung up for seven years—or was it fourteen?—in a bell-shaped cage in the well-like area of a certain French Castle.

The dietary is what, I think, makes most for a bird's happiness or woe. Thrushes and Blackbirds fed on hemp and bread, Nonpareils and Indigo-birds forced to subsist on seed: seeing their own beauty and bright colours fade day by day, and, at last, knowing themselves bald with the anæmic baldness that follows a moult on a seed diet—this is, indeed, misery! To eat is practically the only active pleasure our prisoned birds have, bar the bath and sunshine: and I believe all the faculty of keen enjoyment they have is mainly concentrated in the sense of taste and comfortable repletion. Monotony, again, however, does not seem to trouble them in respect of the staple food they exist upon, and if this is suitable—as the two millets to the Gouldian Finch—they never seem to tire of it. But the joy in finding unexpected, new, or uncommon dainties provided for them is most evident. How many people keep Bullfinches and never give them gooseberry or currant branches in bud or fruit? The former please them best, but the fruit is acceptable, and all manner of berries are welcome to many caged birds, which never reach them.

British Birds at the Crystal Palace.

CLASSES 109 & 110 BY H. J. FULLJAMES.

REMAINDER BY W. A. LOTT.

TRULY "the old order hath changed," and the Show of 1903 seems to have almost severed the last link between the old time shows of the big tent, and the new generation of shows in galleries, orchestras, etc. I am glad, however, to note, in the personality of one of the judges, just one connecting link with the past. Mr. Hills formed this connection in judging for the twenty-sixth time at the Palace. Whether this show was ever held in the gallery in the earlier years of its existence, I cannot say, but, if so, it must have been years ago. Like all changes, the present one wants getting used to. One very great improvement resulting from it is in the light during the day, but it was certainly not so good at night as in the old tent. An item that was very much missed this year was the old practice of raising the number of each class on a wooden standard that could be seen across the benches. The class numbers were there, but were put parallel with the cages, so that one could not read the ticket unless right opposite to it. For the first time in my memory the absentee birds were not marked in the catalogue, and I saw several persons endeavouring to find birds that were not in the Show at all. The suggestion of the N.B.B. and M.C. that a class should be provided for hen Bullfinches was accepted, and this Class should, in another year or so, prove as good a source of income to the L. & P.O.S. as that for Greenfinches, and it is to be hoped that this will encourage the Society to provide still more classes for individual species. There are many birds which stand no chance in a mixed class, and which would be shown much more freely if they had a class to themselves.

The members of the N.B.B. & M.C. have reason to congratulate themselves upon the fact that, with only two exceptions, Classes 91 and 113, our members secured nearly every possible prize.

Is it in the memory of the oldest exhibitor to have seen so many as five Choughs at any Show, Palace or elsewhere? Surely this is a record for these birds.

One great pleasure of the Palace Show is the opportunity it affords for the interchange of opinions between town and country members, and I much enjoyed the opportunity of meeting so many members of our Club.

Whether the artists, professional and otherwise, were more in evidence this year because of the narrower space between the rows, I cannot say, but there certainly seemed to be more persons sketching than in past years, and I hope this is a sign of more general outside interest in the annual Show.

Class 97. *Bullfinches* (33) opened the British bird section. Nine short of last year, but, withal, a good class. 1st went to 1248, Lloyd James, not the deepest in color, but a very fine bird, very big indeed for a Britisher. 1251, Hazell, H.C., I greatly admired.

1262, White, 4th, as rich a coloured Bully as any in the class. 1270, Davies Bros., unnoticed, I considered badly treated. 1250, Webb, 2nd, another good one. We had eight members showing in this class, and they took first, second, fourth, and extra fourth.

Class 98. *Hen Bullfinches* (13) very good for a new class, should be doubled next year as so many exhibitors keep hen Bullfinches for hybrid breeding. There were some nice birds among them, but the judge had an easy task in placing the winners. Several were making big attempts to "sing" to the cock birds opposite.

Class 99. *Goldfinches* (51 only). One of the lowest records for this Show. We have seen nearly as many again. Seven prizes were given, and our members secured every one. 1311, Gough, 1st, a real tip top beauty—upper mandible a little bit off, but the bird had the fine rich brown so typical of a good Britisher. In fact all the winners were conspicuous by that beautiful nut brown colour which is so often ignored. 1318, Foster, a Cheveril; 1305, Webb, 4th, rather coarse in blaze. Mr. Judd possesses some good finches, his second prize being a real tip-top finch. Was 1290 a Britisher? The V.H.C.s in this class seemed to have been rather indiscriminately distributed. 1331, poor moons, otherwise a good bird.

Class 100. *Chaffinches* (29). A falling off again in numbers. Our members captured second, third, and fourth, and were unlucky not to get first. I made Mr. Townes' 1350 (second) a much superior bird to 1338, Ellis (first), although not showing quite as much white. 1340, Maxwell, third, a nice bird and very steady. 1348, Clark, unnoticed, will want some beating when he gets steady.

Class 101. *Linnets* (39), five less than last year. We took five prizes out of the six. Winner, 1382, Turnber, is a good one, but was certainly lucky here, lovely bloom, but too light. Others well chosen. 1388, Longden, unnoticed, a well-marked hen—cock in catalogue. 1381, Fowler, unnoticed, rare size and chubby type. 1375, Prior, 3rd, splendid bird, well marked. Although not so large in number as previously, this class was, as usual, a collection of well-known winners meeting in the final round for honours.

Class 102. *Lesser Redpoll or Twite* ("Redpole" in Catalogue again!). Although the class was for Lesser Redpolls there were several Mealies, and, what is more, they got into the money.

Class 103. *Siskin* (22). The best birds were non-fed and the judge went for these, greatly to the delight of our anti-colour-feed fanciers. Certainly some Siskins are entirely spoilt by over-colour feeding. 4th, Walsh, 1442, was very hot indeed. The showing days of 1447, Raine, 2nd, ought to be over.

Class 104. *Bramblefinch*—great favorites of mine, but only sixteen on show. I have seen much finer quality birds at previous Shows. 1461 and 1462, both Pringle, were the winners of 1st and 2nd. 1463, Judd, 3rd, too hot again. 1456, Clark, C, should have been higher. Many Bramblings lack that nice spotted colouring down the side which is so much to be admired in a show bird. I am told that age increases the density of the black mantle.

Class 105. *Hawfinch* (13). Very grand class indeed; members taking first, second, and third. 1470, Howe, 1st, was not the biggest, but he was a perfect bird in every other point. 2nd, 3rd, and 4th, well-known winners. This class should be more popular.

Class 106. *Greenfinches*, numbered forty, and our members only secured first and fourth. An unenviable task to find the winners out of such an array of

"Greenies." Such size, wing markings, and colour, colour, colour. I did not think the first, 1484, Maxwell, was the best in the class. 1502, Livingstone, 2nd, was more than equal. Others well placed. A grand all round class. 1509, Dawson, might have had a card.

Class 107. *Yellow Buntings*—only eleven. Members 1st, 2nd, and 3rd, all good ones. I quite envy the owner of the winner, 1520, Lloyd James, for he will always want stopping if in condition, but colour, colour again. Others all good fine birds, and all winners away from each other.

Class 108. *A. O. S. of Bunting.* (12). 1st, 2nd, and 4th, members. An interesting class, but I could not follow the judge. I preferred 1533, Lowne, a Snow Bunting, unnoticed, to 2nd, Lloyd James, Snow Bunting.

Class 109. *Any species of Lark or Pipit*, (16). 1st went to Mr. Alloway's Palace winner of 1901 ; a fine, upstanding bird that well deserved its position. 1544, in the same ownership, and 1st at Palace in 1902, had to put up with H.C. One feather in each wing was twisted, and this probably kept him out of the prize-money, as the color and markings are perfect. 1550, Lowne, 2nd, a very fine Shorelark, not so bright in color as, but larger than, 1551 (C.), same owner. 1549, Ride, 3rd, a good Meadow Pipit well placed. 1554, Miss Hawkes, 4th, a remarkably good Skylark, showing colour feeding—could easily win in any other competition. 1550, Groves, V.H.C., a nice Skylark (not Shorelark as catalogued) good size, colour, and markings, but very wild. 1549, Mays, V.H.C., I missed noting. A very good class.

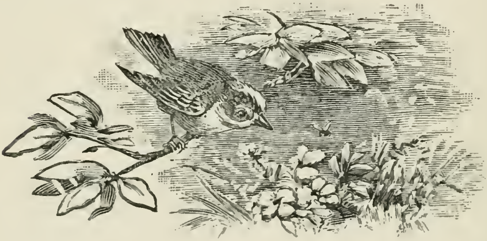
Class 110. *Robin.* (10). 1st to 1561, Pringle, a long way first. An exceptionally fine bird, singing strongly, notwithstanding the crowds pressing within a few inches of his cage. This bird is a very strong commentary against the popular prejudice that it is cruel to keep Robins in cages. I remember a lady once begging me to sell her a Robin, and, when she had bought it for 10/-, letting it fly immediately, saying it was "bad enough to keep birds in cages at all, but absolute cruelty to cage a Robin." If this lady had seen the Robins at the Palace I think she would have changed her opinion. 1565, Pretty, 2nd, loses in color to 1st, and a little rough in feather, should have changed places with 1564, Miss Laskey, 3rd, a very typical bird in beautiful colour and feather. 4th, Webb. V.H.C., Baker. H.C., Jeffrey. C., Miss Hopwood.

Class 111. *Blackbird.* (13). 1571, Morgan, H.C. last year, 1st this. 1573, 3rd, a grand fellow, same owner; 1568, 2nd, Law, another good one.

Class 112. *Thrush.* (19). A collection of grand birds. 1587, Morgan, 1st, in right place. 1590, Sharp, 2nd, another gem. 1588, 3rd, another of Mr. Morgan's grand stud of Britishers.

Class 113. *Starling.* (16). A very good class and the judge found the best four. 1607 should have a chance as a performing Starling—a perfect acrobat.

(To be continued).



Hybrid Notes from the Palace.

By R. Browning.

ANOTHER Palace Show is past and gone,—with its lessons and disappointments, its pleasant surprises and consequent joys—that the latter may far outweigh the former, is the wish of at least one, whose interest in Hybrids seem to increase as the difficulty of their culture become more apparent.

Fanciers having asked on many occasions for a class for Light Linnet Hybrids, I fully expected, now that this wish has been granted, to find a decent class of rare birds, but was sorry to see only five entries: a poor encouragement, surely, to the Society which provided this Class for us.

The first Class under notice—"clear, ticked, or even marked," should certainly be divided, for no judge can please himself—much less the exhibitors—where "varieties" meet. The first and second prize winners, being clear, and the Derby crack "even mark," 3rd, the Sheffield Champion must fall 4th. This is in accordance with some fossilized ideas, I dare say, but it is not right to my way of thinking. In my opinion, if the first half-dozen in a class are all "clears," and good clears, they should stand in front of the "even marks" be they ever so good. Or why call the "clears" the highest standard of merit in mules?

The two Classes for "uneven marked or variegated" had some splendid birds, the winners standing right away for colour, size and near approach to perfection in marking, combined with condition—quite right too for these classes. Some smart birds followed the winners, but lost in size.

The winning light Linnet was a splendid bird; and there was not much to choose between the 2nd and 4th. The Greenfinch Mules here I did not care for.

Dark yellow and dark buff Goldfinch - Canary classes were small in numbers compared with what I have seen here, but the winners were found fairly well I think. Stoutness, good shape and size (with good feather and colour) made up the birds for top tickets—the winning yellow being one of the best I have seen for many a day ; and but for a missing hind claw nail, and age, would not have been long unclaimed.

Dark Greenfinches were not over strong ; and although some nice birds were there, there was not a bird with anything like the "short, chubby chest, short tail and flights" of the bird I like for a Greenfinch Mule. A fair lot of Yellows—sweet birds, but none so large as they can be got.

Dark Linnets were a most interesting lot. Is it fair for those Cinnamons to be here ? Should they not go in the A.O.V. Class and fight it out with something else just as rare? They frighten away good normal coloured birds. The second prize bird, a dark yellow, good all round, a champion on its own grounds—larger, stouter, grand feather and colour—with absolutely no fault except that it is *normal coloured*. Oh, the pity of it ! to be thus *normal colour* instead of rare or Cinnamon. By the way, why allow these Cinnamon Mules along with ordinary ones, more than Cinnamon or rare feathered British birds with the normal specimens of their species—when a Class is provided for them ? I have no prejudice against these rare coloured Mules, but ask for fairness for the normal ones—that is all.

Siskin, etc., got together 16 entries, and I noticed the winner to be an exceptionally fine yellow Siskin Mule, far the best of the lot, but far behind those two beauties Mr. Lambert Brown used to show us.

Ah ! those Canary-Bullies. The two now well-known ones have been seen and heard of before : the Cinnamon bird is thought by some to be a

Greenie-Bully. Now, I take it to be what the breeder says it is, viz., "Cinnamon Canary and Bullfinch." Greenie - Bullies have larger, flatter heads, are browed like a Crest-bird, have shorter tails, and the tails and flights are barred like the Greenfinch's: but none of this is found in the Cinnamon bird, and it is my firm opinion the bird in question is of the cross it is claimed to be.

Other Bullfinch Hybrids had a poor entry also, but what was lost in numbers was made up in quality, for never in my little experience have better birds than the first three met together anywhere. Of course I have not seen those larger and better ones we were told of last year. The champion Linnet-Bully deserved a win, if only for the sake of its war record. I expected more colour on this bird, but even now it has few equals.

The Class for any variety Hybrid, bred from two British birds, had some charming and interesting little cage birds; Goldy-Greenie winning as usual. This is not a hard bird to breed, and its favour with most judges (on account of size, I suppose) tends to discourage other crosses. But variety classes are bound to cause a difference of opinion. I thought Mr. Coutt's Siskin-Greenie, and Mr. Ward's Gold-Greenie the best of the lot, but perhaps I do not well understand them.

Now, taking the Hybrid classes from start to finish, I have no hesitation in saying "Far worse work might have been done by an older man than was done this year by a 'prentice hand." Fanciers should drop self-interest once a year and try to make the Palace Show a truly representative one. Here we have a classification such as is provided nowhere else, yet Hybrid entries are few. Surely exhibitors can support one Show in a season without caring for the profits. Mind, I am not one to preach showing other than to win, while I strive to win all I can; but think we could give better support than we do to the Hybrid classes, this once a year. If we cannot—then I fear we shall not be catered for as we have been—instead of yet still better—and we shall have ourselves to thank—nobody else.

Foreign Birds at the Crystal Palace.

THERE is much in a name. The February Show of the L. & P. O. Society held at the Crystal Palace is "the Palace Show"—and so long as it bears that name it will remain the inheritor of great traditions, and continue to be the chief annual festival of bird exhibitors, in spite of a restricted classification and some other obvious deficiencies. This explains the fact that a foreign bird classification of only nine classes (we do not count those for foreign Goldfinches and Bullfinches) attracted an entry of 134, while at the Aquarium in November twelve classes contained only a little over 100 entries.

The Show commenced on the 13th of February, 1903, and concluded on the 17th. This year it was held upstairs, in a draughty gallery—the change did not appear to meet with the approval of the exhibitors. The only advantage was the better light during the day.

Over 100 of the exhibits belonged to members of the F. B. C., who obtained all the prizes except four, and all the cards except six. The first prizes, without exception, were awarded to members of the Club.

The Parrots were judged by Mr. Camps, the other classes by Mr. Russell Humphrys—and, as might be expected, their awards seem to have given satisfaction on the whole.

Class 121. *Budgerigars and all species of Lovebirds.* Eleven entries. Mr. Storey's well-known pair of Peach-faced were, as usual, first. Mr. Howe's Red-faced was second. Mr. Osbaldeston obtained 3rd and 4th for his pairs of Budgerigars and Peach-faced respectively. V.H.C., Thorne; H.C., Osbaldeston; C., Mrs. Cooper—all for Budgerigars.

Class 122. *All species of Parrakeets.* Seventeen entries, of which two appeared to be absent. First, Mr. Hawkins' Varied Lorikeets—very charming little birds of which a few examples have come over lately. These specimens were looking rather out of sorts, and judging from the contents of their food vessels, were not being judiciously dieted. Second, Mr. Osbaldeston's fine King. Third, Miss Edith Castell's Pennant. Fourth, Mr. Howe's very nice Rock Peplar. V.H.C., Osbaldeston, for a pair of Crimson Wings, and Ritchie for a Rosella. H.C., Morgan, for a King Parrakeet. C., Thwaites and Lloyd for a King.

Class 123. *Grey Parrots and all species of Amazons, Cockatoos, Macaws, and Lories.* Thirteen entries. First, Mr. Osbaldeston's Blue and Yellow Macaw—certainly a very fine creature—the blue was of a wonderful tint. Second, Mr. H. Young's Amazon, which we took to be the Yellow-fronted. Third, Mrs. C. Cooper's Blue and Yellow Macaw. Fourth, Mr. Fox's Grey Parrot. V.H.C. Mr. Osbaldeston's Yellow-naped Amazon. H.C. Mr. Babbs' Swainson's Lorikeets, which, being Lorikeets and not Lories, should have been "wrong-classed." The class also contained Mr. Cushny's well-known old Blue-eyed Cockatoo, a Red and Blue Macaw, a Rosy Cockatoo, and some Blue-fronted Amazons.

It will be observed that the classification adopted relegated all the true Parrots other than Greys and Amazons to the A. O. S. class.

Class 124. *Doves and Quails.* Cancelled.

Class 125. *Various (named) common Seed-Eaters.* Seventeen entries, of which we think three were absent. First, Messrs. Thwaites and Lloyd's pair of Parson Finches, of not very conspicuous merit. Second, Mr. Townsend's Golden-breasted Waxbills. Third, Mr. Hawkins' Diamond Finch—we question the expediency of awarding a prize to a single bird in this class. Fourth, Mrs. Skey's Silverbills, which might have been higher up. V.H.C., Osbaldeston (Spice-birds), Hawkins (Golden-breasted Waxbills); H.C., Picard (Diamond Finch). Mr. Swaysland exhibited a pair of White-headed Mannikins, the male of which was certainly not the ordinary *Munia maja*, in fact, it looked more like a cross between the White-headed and the Black-headed species, and such we were at first disposed to regard it, but on looking up the genus we found it to be an example of the rare Javan Maya Finch. It differs from the White-headed Mannikin in having a black throat.

Class 126. *All species of Waxbills, Grassfinches, and Mannikins, not comprised in the above.* Twenty-one entries. First, an "unknown Waxbill" entered by Mr. Hawkins. This was one of the greatest attractions of the Show—it bore some resemblance to the Painted Finch, but was evidently not of that species. I find that Mr. Seth-Smith considers it one of the Fire Finches (*Lagonosticta niveiguttata*). Second, Mr. Hawkins' Red-faced Finch. Third, Mr. Osbaldeston's Rufous-tailed Grassfinches. Fourth, Mr. Hawkins' Black-rumped Finches. V.H.C. Townsend (Long-tailed Grassfinches), Osbaldeston (Pin-tailed Nonpareils), H.C., Picard (Aurora Finch), Howe (Black-headed Gouldian), C., Townsend (Lavender Finches), Osbaldeston (Black-headed Gouldians). Mr. Hawkins exhibited in this class a pair of *Estrilda angolensis*—a near relation of the Cordon Bleu, from which it is distinguishable by the absence of the red ear patch in *both* sexes. This entry was marked in the catalogue "Ill"—in fact one of the birds was obviously suffering from that curious nervous complaint which sometimes attacks birds in captivity, and causes them to twist their heads about in a strange and distressing manner.

Class 127. *All species of Grosbeaks, True Finches, and Buntings.* Nineteen entries, of which we failed to find two or three. First, Mrs. Cooper's Virginian Cardinal, which did not strike us as a particularly good specimen. Second, Mr. Hawkins' Olive Cuba Finches. Third, Mr. Hawkins' Grey Singing Finches. Fourth, Mr. Housden's Virginian Cardinal. V.H.C. Cooper (Pileated Finch). Osbaldeston (White-throated Finches). H.C. Housden (Dominican Cardinal), Osbaldeston (Olive Cuba Finches). C., Smith (Black-headed Buntings—two cocks), Smith (Red-crested Cardinal). Mr. Swaysland exhibited a pair of uncommon Sparrows, which may have been *Passer luteus*—if so the male (which died at the Show) was in immature plumage.

Class 128. *All species of Tanagers, Sugar Birds, Honeyeaters, Zosterops, and Bulbuls.* First, Mr. Townsend's Tri-coloured Tanager. Second, Mrs. Skey's Scarlet Tanager (certainly lucky to attain the position in such company). Third, Mr. Townsend's Blue-winged Green Bulbul. Fourth, Mr. Swan's White-capped Tanager. V.H.C., Swan (Blue Sugar-bird—out of colour, but a good specimen). Osbaldeston (Golden-fronted Green Bulbul). H.C., Townsend (Yellow Tanager), Richell (Scarlet Tanager), C., Townsend (Japanese Zosterops), Townsend (Chinese Zosterops). Mr. Hawkins' Purple Sun-bird—not looking so well as at the Aquarium—was again wrong-classed. It seems a pity that the judge did not feel at liberty to interpret the word "Honeyeater" a little more liberally. The class also contained a Striated Tanager, a Warty-faced Honeyeater, two more pairs of Japanese Zosterops, and some more Scarlet Tanagers and Green Bulbuls. This was a very fine class.

Class 129. *All species not comprised in the above.* Thirteen entries. First, Mr. Hawkins' charming pair of Silver-eared Mesias. Second, Mr. Osbaldeston's Green-billed Toucan—one of the best Toucans ever exhibited. Third, Mr. Hawkins' Blue-winged Siva. Fourth, Mr. Townsend's Andaman Starling. V.H.C., Osbaldeston (pair of Indian Shamahs), H.C., Osbaldeston (Blue-cheeked Barbet), C., Smith (Purple-headed Glossy Starling). The class also contained a cock Shamah, a Red-headed Starling, an unnamed Indian Starling much resembling our British species, and a Rosy Pastor. Also a pair of White Java Sparrows and a Zosterops—both wrong-classed.

Correspondence.

A NONPAREIL'S ADVENTURE.

Sir,—The other evening I went down to my aviary to shut it up for the night, and the wind, which was very rough, blew the door wide open.

This frightened the birds very much, and a beautiful Nonpareil darted out through the open door-way. I tried to catch it, but it flew right over a high bank, and away towards the meadows near. I put some food in a cage and fixed it up against the outside of the aviary.

The next morning I went out early to see if the bird had returned, and, to my delight, I saw it sitting on a fence near the aviary. It was rather frightened when I came, near and flew away. I put the cage (which the wind had blown over during the night) up again, and went away. In about a quarter of an hour the bird came back and rushed into the cage. I quickly secured him and took him into the aviary, and he seemed delighted to be at home again.

He had been out in a dreadful storm of wind and rain all night, but seemed not a bit the worse for it.

I think he must be a very intelligent bird as I have never before known a foreign bird to return after having escaped. The bird has always been a great favourite of mine, but I think more of him than ever now, after his adventure.

M. E. BAKER.

THE CHOUGH'S ESCAPADE.

The well known Cornish Chough belonging to our member Mr. Morgan, and the winner of some 50 first prizes, had, apparently, heard of the pleasures of an outdoor London life enjoyed so long by the late lamented famous Brixton Jackdaw, for on the afternoon of February 9th last, he went for an excursion on his own account, and led his pursuers a nice chase over the roof-tops of the New Kent Road. He seemed to quite enjoy his spell of freedom, whittling his beak on the chimney-tops, and preening his flights in evident appreciation of his unwonted liberty. Travellers on the tram-cars were considerably amused at his antics, and at the efforts of his pursuers to recapture him. He led a small army of these a nice run of about four hours, after which he took it into his head to explore a room, of which the window had been left open, and was restored to his cage, none the worse for his escapade.

W. A. LOTT.

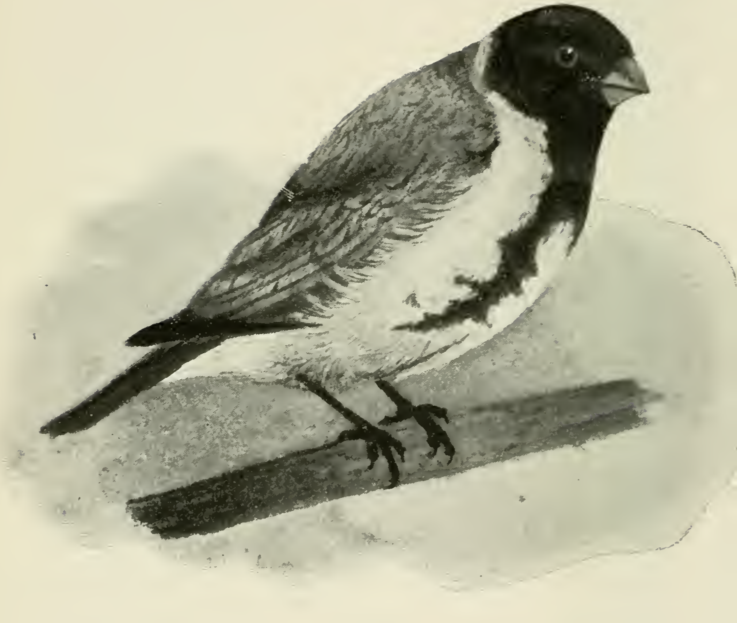
To our Readers.

WE hope and believe that the alterations in our Magazine will meet with your approbation. Mr. J. A. SWAN has generously borne the expense of the artiistic block for the cover—having first obtained the consent of the owners of the copyright (Messrs. THOMAS NELSON & SON) to the reproduction of the design. We have to thank Mr. SWAN not merely for the block but for invaluable advice and assistance in all the details of our new arrangements, and it is not too much to say that the improved aspect of "Bird Notes" is chiefly due to his initiative.

We should like to avoid, this year, the necessity for making constant appeals for "more copy"—and will therefore say, we hope once for all, that we can make use of all, and more than all, the suitable matter we receive. We trust that you will bear in mind the fact that "Bird Notes" is written *by* the members of our Clubs as much as *for* the members, and beg that all of you, who can, will make an effort to share in the work of contributing to its pages.

It is intended that the plates which accompany this issue shall become a regular feature of the Magazine, and we shall be glad to receive drawings and photographs for reproduction.

H. R. FILLMER.
W. A. LOTT.



THE ALARIO FINCH (MALE).

Alario alario.

From a drawing by Miss ELEANOR BROOKSBANK.

The Alario Finch.

By H. R. Fillmer.

The colouring of this charming South African songster is by no means brilliant. The male has the whole of the back, wing coverts, and tail, reddish brown (the colour of a bay horse). The head and throat are black, and the black extends down each side of the body forming an irregular black band on each side of the breast and leaving the centre of the breast and abdomen dirty white. The white colour extends upwards, over the shoulders—almost meeting at the back of the neck. The quill-feathers are black.

In the female, the bold masses of black and white and brown, which distinguish the cock, are absent, and the general colour is a greyish brown washed with reddish brown on the upper parts. The female is usually markedly smaller than the male.

Young males resemble the females, and assume the distinctive plumage of their sex gradually after a moult. My aviary-bred cock came into full plumage after the first moult, when only a few weeks old—and I presume that this is the normal habit of the species. But I have once or twice possessed young imported males which had black heads but were not in full plumage—and one of these moulted several months after importation and then came into full plumage. When I first acquired this bird he was quite unlike a hen (or a cock in its nest feathers); and yet he differed greatly from a full plumaged cock—the colours being much less clearly defined. Is this intermediate stage of plumage merely an accidental condition caused by the shock of importation—in fact simply a prolonged moult—or is it natural for some Alario Finches to moult twice before acquiring full adult plumage?

Five or six years ago the Alario Finch was fairly common—but of late, especially since the beginning of the Boer war, it has been practically unobtainable. Hens were always difficult to buy. There seems no reason why this bird should be so seldom imported, for it is a very common species in South Africa, and frequently kept as a cage-bird there.

According to Dr. Butler, the bird is "a long liver and very hardy," but a fairly extensive experience of the species, some years ago, brought me to an opposite conclusion. I find it decidedly more delicate than the Singing Finches. White millet seed should never be given to this species (nor, indeed, to any of the True Finches). Canary seed should form the staple of its diet, with the addition of summer rape seed, and a little hemp occasionally.

The following account of the breeding of the Alario Finch has been published before—but as it relates the only recorded instance of the species nesting successfully in Britain (if not in Europe), I may, perhaps, be pardoned for reprinting it here.

Hybrids with the Canary hen have been several times obtained.

In the autumn of 1895 I succeeded in obtaining two females from Mr. Swaysland: one of these was a young bird in good plumage and perfect health, which I placed in an aviary with a male which had been in my possession for some time. The male sang to the hen, but she never attempted to build. The other female was considered by Mr. Swaysland to be a bird which had recently nested in a state of freedom—he came to this conclusion from the state of her plumage. This bird was in very shabby condition, and, instead of improving after I purchased her, she went from bad to worse, until she was almost bare of feathers, and I feared she suffered from some feather disease. However, about May, she moulted, and came into splendid plumage. Shortly after this I obtained from Mr. G. C. Swailes, in exchange for another bird, a remarkably vigorous male Alario Finch, which I immediately placed with this hen, in a good-sized indoor aviary all to themselves, and almost immediately had the pleasure of seeing her begin building. The nest was built in an open Canary nest-box with a perforated zinc bottom, which I had hung up high on the wall at the back of the aviary. The nest was a beautiful little structure of hay, neatly lined with hair from a common Canary nest-bag. I never saw the eggs, but I believe that only two were laid; for two young were hatched, and no eggs were left in the nest when I examined it after the young had flown.

The hen began to sit on the 7th of July (1896) and hatched on the 19th or 20th. The young left the nest on the morning of the 2nd of August, when, to my great surprise, I found them at the bottom of the aviary. They could not fly for several days after. While the young were in the nest the parents partook of hard-boiled egg and biscuit, and Abrahams' preserved egg, but afterwards very little if any egg was eaten, and I think the young were mainly reared on crushed hempseed and green food. Considerable quantities of chickweed and lettuce were consumed, but not very much of anything else.

The young birds were much like their mother, but greyer and more speckled. One turned out to be a cock and the other a hen. I thought for a few days that the mother would have laid a second time, as she became rather busy with nesting material; but colder weather set in, and all inclination to nest passed away.

Next year the same hen hatched two or three young ones—one or two of which, if I recollect rightly, lived to be almost independent of their parents, but died soon after they began to feed themselves. After this I was very unlucky with the species, and before long my whole stock had died out.

The Alario Finch is a most attractive bird. Although plainly attired, it is decidedly pretty, and is of a most gentle and confiding disposition. It seems to be naturally fond of human society, and free from that dread of mankind which possesses most birds.

There is no bird which will sing more industriously than a healthy cock Alario, and his sweet warble is so gentle that even the most sensitive person would not be disturbed by it. He is specially adapted for keeping as a pet in a roomy cage by himself, and under such conditions will speedily become most delightfully tame, and entertain his owner with a cheerful and musical song.

In the aviary with other birds the Alario Finch is perfectly harmless—but not very capable of defending himself from more aggressive birds.

The Kingfisher.

By J. H. Cullen.

(Continued from page 10).

Young Kingfishers have their full plumage and colour from the nest: the adult may be a little brighter, but I have failed to notice any great difference. No one can possibly conceive the difference between the beautiful sheen and lustre of living specimens and the comparative dulness of a dead or stuffed specimen. In death the sheen and lustre depart after a few days, never to return.

The nest of the Kingfisher is usually placed in a hole in the bank of a stream or river; sometimes in the hole of the masonry of a bridge; but other sites are sometimes chosen. In one instance, I knew the Kingfisher to build its nest in a high bank, in a field, quite a quarter of a mile from the stream it frequented—the banks of the stream being very low and the land flat, there was no facility for the birds to nest, as in a stormy time the land was often covered by the stream overflowing its banks. Another strange site for a nest was pointed out to me by a man whose duty it is to keep clear of water-weeds and other obstructions the water courses of the large dykes or phines (as they are called in this district) that drain the moors. On the banks are some very large willow or withy trees. In the head of a pollard about eight feet high, about five years ago, a Kingfisher built its nest, and hatched and reared a brood successfully. It has never built there since.

The Kingfisher, if undisturbed, frequently occupies the same hole year after year. That I can prove, for in the season of 1900 I obtained seven eggs out of a nest. (If I had not had them someone else would—I took them to induce the birds to seek safer quarters, which they did). The second week in June, 1901, the same site was occupied, and the brood were reared and got off successfully. Again, in the season 1902, the same site was chosen, and eight young ones were hatched ; but were destroyed by some one, when not quite three weeks old. Some prowling, mischievous boys no doubt destroyed them by pushing a stick up the hole ; as I found the stick in the nest when I visited the spot to watch the parent birds flash in and out. It would have been a grand opportunity to have snap-shotted the old one just leaving the nest. I had arranged with a friend, a good amateur photographer, who promised to come and do it : but unfortunately he was taken ill and I could get no other photographer to come until after the nest was destroyed. The sites or positions of the nests, four in number, which I have observed in the banks of this particular stream, were between ten inches and two feet from the top level. The burrow or entrance is about three inches in diameter, and the depth in two instances about twenty inches, and in two others about thirty inches. The burrows slope upwards, and the nest, being at the end of the burrows, is only about eight or nine inches from the surface of the ground. My plan for examining the nest is to cut out a square turf (it is grass land) about four or five inches square, and about sixteen inches from the entrance to the burrows. I can then put my hand in and take out either eggs or young.

I am inclined to endorse Mr. Norman Gillroy's opinion that the Kingfisher makes its own burrows, as the banks in which the nesting places are situated are composed of hard red marly clay, rather smooth, and almost perpendicular—so that it would be almost impossible for them to be the deserted holes of the water rat or vole, for they could not possibly climb the banks, which are often overhanging ; and there are no Sand-Martins here in this district. As regards the nesting material, it is generally stated to be small fish bones, but all the nests I have examined seemed to be composed of the husks or outside skins of the fresh water shrimps, with which the stream abounds. I have seen one beautiful specimen of a nest in the possession of a gentleman, Mr. Ridgesford, late of Wraxal Court, now residing in Clifton, Bristol. This nest was like a tea-saucer, about five inches in diameter, and about half to three quarters of an inch in thickness, entirely composed of small fish bones cemented together. It was obtained in the Midland Counties by a gamekeeper, and must have been a nest that had been occupied year after year; hence its perfect form and unusual thickness.

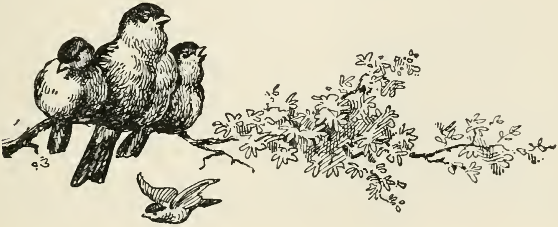
The eggs are pure white, nearly round, usually from six to eight in number, as far as I can ascertain.

There is but one species of the Kingfisher in Britain: Australia and South America producing the greatest number of species. The ornithological or Latin name of our English species is *Alcedo ispida.* I came across one record of the Belted Kingfisher *(Alcedo alcyon)* being found in Ireland, in the counties of Meath, Antrim, and Wicklow, but no date was given. As this is a South American species, so I have been told, I should think it must have been an imported bird that had escaped.

To hand-rear these birds, they should be taken from the nest when about twenty-one days old; it takes them a long time to get their feathers, so it is quite thirty days before they leave the nest. They should be placed in a box properly ventilated, on some moist or fresh earth, and fed about every three quarters of an hour. The food, if possible, should be live minnows or small gold fish cut small, or fresh fish, such as plaice or whiting, cut in strips—raw lean beef, minced very fine, may be given for a change. The ones I reared had to be crammed, as they would have left the nest in a day or two when they were taken. I should never have taken them in hand, but someone broke open the nest and removed three of them. (He did not succeed in rearing them—I was afterwards told that he tried to feed them on barley meal). So I removed the other three to save them from a like fate. I was persuaded to do it by a friend who knew the nest; as some one else was going to have them if I had not come to the rescue. I only had them a few days before they showed signs of feeding themselves. I then placed them in a box about five feet long by six feet wide, and fifteen inches deep, covering the top with wire netting. There was a perch about nine inches from each end and a shallow dish in the centre for water. I fed them on lean raw beef soaked in water overnight to extract the blood, and cut in strips, fresh whiting and other fish, and such live fish as I had time to go and catch. When they could peck, the food was put into the water, as they would not pick it up off the bottom of the box. They would dive from one perch into the dish and take it to the perch at the other end of the box, always seizing the food crosswise in their bills and striking it, no matter whether a strip of beef or a fish, from side to side on the perch. A jerk of the head to throw it lengthwise in the bill, and gulp, down it went. When they wanted food, they would call for it, "Zip, zip, zip," and they got very tame and familiar, and when I talked they would raise the feathers on the back of their head, like a crest. They seemed to have the power of sticking out, like whiskers, the short feathers under their chin or lower mandible, at will and pleasure. They got so tame that we used to let them out for exercise in the washhouse. When on the ground they did not hop like most birds, but shuffled along with a sidelong movement, and then would readily come upon the hand when placed on the ground and peck your finger. I could carry them about the house and they would make no attempt to fly away, and on pointing my finger at them, and talking to them when not hungry, they would look up with their bold brilliant eyes, seize my fingers in play, and utter their "Zip, zip;" but if a stranger came and looked at them they immediately shouted their wild alarm, "Chee, chee, chee," and beat themselves about. When I talked to them they had a way of bobbing their heads up and down, and from side to side.

It was a very troublesome job, the rearing of the young Kingfishers, though it afforded me a splendid opportunity for studying them; but I shall never undertake it again, and in conclusion I am of the opinion that it is utterly impossible to make, in the proper sense, a cage bird of the Kingfisher. But those who have a fancy for keeping them could manage it in an aviary, with plenty of room, and an artificial pond of running water plentifully supplied with live fish. They would not do long with stagnant water, and it is impossible to keep them long on dead fish, such as we get at the fishmongers. They will not survive long, for I only kept the ones we had for about two months; they dropped off one after another, much to my sorrow, as they were so tame.

I repeat that I consider the decision to exclude the Kingfisher from the cage bird list a very righteous one.



Parrots and Parrakeets.

By Dr. C. S. Simpson.

(Continued from Vol. 1, page 307).

The Grass Parrakeets (*Neophema*) are another Australian group which in beauty of plumage rival the Psephotus Parrakeets, and are very much more easily kept in confinement. The best known species are the Turquoisine (*N. pulchella*) and the Elegant (*N. elegans*), but the former has been very scarce of late years, and the latter quite unobtainable. The Turquoisine is an exceedingly beautiful bird; the upper parts of the body are of a deep green, the breast and abdomen rich yellow, the forehead, cheeks, and chin brilliant verditer blue, the outer upper wing coverts and the under surface of the wing are also blue, and there is a chestnut spot on each wing. The female is less brightly coloured than the male. The Turquoisine will stand the coldest weather out of doors, and a pair in a roomy aviary provided with hollow logs will readily breed. They feed on Canary seed and spray millet. I have found this species to be rather dull aud quiet in a cage. The Elegant Parrakeet resembles the Turquoisine closely, but the blue on the head is confined to a band on the forehead. The two species readily inter-breed, but I am not able to say whether the young of such unions are fertile.

The splendid Parrakeet (*N. splendida*) resembles the Turquoisine, but is distinguished by the rich scarlet of the breast. The Orange-bellied Parrakeet (*N. chrysogastra*) more closely resembles the Elegant, but has a patch of bright yellow on the abdomen. Bourke's Parrakeet (*N. bourkei*) is another species which used to be imported, but seems to be unprocurable now. The upper parts of this bird are reddish-brown, the under parts rose colour, the forehead, outer wing coverts, and under tail coverts are blue.

The Swift Parrakeet (*Nanodes discolor*) is an Australian species which appears to be somewhat closely related to the Psephotus Parrakeets, and it requires similar treatment in confinement. It is curious that although this bird is extremely common in South Australia and Tasmania it is both rare and costly in England. Those who have kept this species report that it is not delicate. It is rather smaller than the Many-coloured. Its general colour is bright green; the face, forehead, under wing coverts, and under tail coverts scarlet, the crown blue, a band bordering the red of the cheeks and throat yellow, the tail feathers brownish-red.

The Budgerigar (*Melopsittacus undulatus*) is the commonest of all foreign cage birds. Great numbers are imported every year from Australia, and many are bred in England and on the Continent. It is the hardiest of birds, appearing perfectly indifferent to the coldest weather. Its diet is Canary and millet seed. It is the easiest of foreign birds to breed, and a single pair will often rear young even in a small cage. In order, however, to breed them successfully, it is desirable to turn at least three pairs into a roomy aviary provided with cocoa nut husks; under such conditions they will often rear a large number of young.

I have never been able to understand or appreciate the misguided ingenuity which has succeeded, at the cost of much trouble and patience, in effacing the rich colour and beautiful markings of the normal Budgerigar, and producing that sickly washed-out albino, the yellow variety. A blue variety has also been produced. A great many Budgerigars are imported every year from the Continent, and are sold very cheaply. Amateurs should avoid buying them.

For some reason (probably persistent in-breeding), they are of a feeble constitution, and many of them die from French moult, that is, inability to reproduce new feathers after the moult.

CYANORHAMPHUS.—The Parrakeets of this genus inhabit New Zealand, New Caledonia, and the Society Islands. The New Zealand Parrakeet (*C. novæ zealandiæ*) is the species usually kept, and though formerly common enough has been rare lately. It is of a rich green colour, the forehead, crown, and a streak across the eye crimson. It is a quiet, shy bird. One which I kept for some time ran very quickly about the floor of the bird-room, almost like a rat, and, if frightened, would run behind a box or piece of furniture, but it seemed to have little power of flight. It was a very silent bird. It would allow itself to be handled but never appeared to know one person from another. The New Zealand Parrakeet will breed in an aviary.

A few years ago a good many examples of *C. auriceps* were imported, and the species nested successfully in an aviary at Stockport.

The COCKATOOS (*Cacatuidæ*) number nearly thirty species, which inhabit Australia, Tasmania, and the East Indian Archipelago, including the Philippine Islands. Here they live in great flocks, the screams from which are said to be audible even when the birds are flying so far overhead as to be invisible. They do great damage to the crops, as, like all Parrots, they are very destructive, injuring far more than they actually eat. They breed generally in hollow trees, but sometimes in holes in rocks and cliffs, the larger species laying two eggs, the smaller species from four to six.

All the Cockatoos are crested, but in some species the crest feathers are not long enough to be noticeable except when erected. They are mostly birds of large size, and are, as a rule, particularly tame and affectionate in confinement, and they are among the most intelligent of the Parrots, but many of them are incorrigible screamers, and they are all terribly destructive. They are hardy and long lived, and they require only a diet of maize, hemp, oats, and other grain, with an occasional biscuit and piece of apple. About fifteen species are imported. The biggest of all the Cockatoos is the Great Black Cockatoo (*Microglossus aterrimus*), a native of New Guinea, which measures no less than thirty inches in length. It is of a slaty black colour, excepting the naked skin of the cheeks, which is pale red. A smaller variety of the same species comes from the Aru Islands, and seven other species of Black Cockatoos are known.

The Gang-gang Cockatoo (*Callocephalon galeatum*) is grey with a scarlet head and crest. It is found in South-East Australia and Tasmania, and is rarely seen in confinement. A pair were exhibited at the last Show at the Aquarium.

The Rosy Cockatoo (*Cacatua roseicapilla*) has the upper surface grey and the under parts rosy red. It is the commonest and cheapest of the Cockatoos, and a terrible screamer. The feathers of the head are erectile, but can hardly be said to form a true crest. The general colour of all the other Cockatoos is white, the plumage being also full of a whitish powder. The Great Salmon-crested Cockatoo (*C. moluccensis*) is one of the most splendid of the Parrots, being white with a delicate rosy tint, the long inner feathers of the crest edged with orange vermilion. The Blue-eyed Cockatoo (*C. opthalmica*) derives its name from the circular patch of naked blue skin round the eye. It is a large species, not less than eighteen inches in length. Ducorp's Cockatoo (*C. ducorpsi*) also has a naked blue patch round the eye, but is distinguished from *C. opthalmica* by its much smaller size. Goffin's

Cockatoo (*C. goffini*) is very much like Ducorp's, and the two are sometimes confounded, but the naked skin in the Goffin is white with only a tinge of blue. This species is said to be the most affectionate and companionable of all. The Bare-eyed Cockatoo (*C. gymnopsis*) is another species which has the periopthalmic region bare of feathers, but in this bird the naked space instead of being circular is prolonged downwards so as to be irregular in shape. The Nasecus or Slender-billed Cockatoo (*Licmetis nasica*) is distinguished by the projecting upper mandible.

My space will only allow me to mention the Great Sulphur-crested Cockatoo (*C. galerita*), the Lesser Sulphur-crested (*C. sulphurea*), the Great White Cockatoo (*C. alba*), and Leadbeater's (*C. leadbeateri*).

(To be continued).

British Birds at the Crystal Palace.

(Continued from page 18)

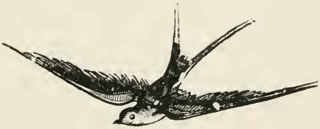
By H. J. Fulljames.

Class 114. *Magpie, Jackdaw, Jay and Chough,* (15). In this class the Judge was instructed to give one prize to each species, and not to consider a second bird of a kind until after the four prizes had been awarded. A most unfair regulation, which resulted in the prizes being given very differently from the way in which they would otherwise have gone. Given good birds of each species, which is of course a certainty at the Palace, the positions were a foregone conclusion—Chough 1st, Magpie 2nd, Jay 3rd, Jackdaw 4th, and this, naturally, is how they were placed. It is strange that owners can be found willing to pay 2/- entry fee, and the expense of conveying large cages to and from the Show, for a chance of winning a prize of 2/- or 5/-, as were the owners of Jackdaws and Jays respectively. Mr. Morgan's old champion won well (his 50th win) in finer condition and colour than ever. There were no less than four Cornish Choughs in the class, one of which, 1615, Gibbins, was V.H.C., and one, 1614, same owner, H.C. These cards might have been reversed; in fact, the V.H.C. might, without injustice, have gone to 1616, Mr. Plumbridge's old champion, which lost in colour only to the winner. 2nd, Snow, a fine Magpie. 3rd, J. and R. Lewis, a good Jay in perfect feather. 4th, Plumbridge, a nice Jackdaw, well shown. C., 1621, Howe, another Magpie.

Class 115. *Pied, Albino, or Rare-feathered specimen of British Bird not being a Hybrid* (17). As usual, one of the most interesting classes in the Show. The judge had an easy task in finding the winner, 1635, Steel, an Albino Yellowhammer, in beautiful condition, and one of the most discussed birds in the Show. 1638, Jones, 2nd, a Cinnamon Blackbird, not such a good colour as some of these rarities we have seen. 1632, Webb, 3rd, a very light pied Goldfinch, nearly all white, might have been 2nd. 1639, Morgan, 4th, a fine White Blackbird, might also have been before the Cinnamon specimen. 1637, Jones, H.C., a "White" Blackbird, was neither white nor cinnamon. 1641, Lawson, H.C., another "White" Blackbird, was much nearer white, perhaps only wanted washing. 1630, Best, V.H.C., a very typical Linnet, only a few light feathers. 1634, Fowler, V.H.C., another nice Linnet, rather wild. 1636, Steel, an Albino Sparrow, would certainly have been in the money but for two unsightly bare patches on the rump. If the feathers missing were of normal color the bird would still have been good enough to win, but their absence put it completely out of court.

Class 116. *Any other "Variety" Resident* (21). When will the L. & P.O.S. Show Committee drop the word "Variety" in connection with British and Foreign Birds, and use the proper expression "Species"? In some of the classes the correct word is used, but the letters "A.O.V." seem, like the Crystal Palace spelling of "Redpole" for "Redpoll, to die very hard, and they still crop up in Classes 116 and 117. We had in this class the very interesting opportunity of studying at close quarters three different species of Woodpecker; the Lesser Spotted, Greater Spotted and Green. Two of these, the Lesser Spotted, 1st, and the Green, 4th, were shown by Mr. Maxwell in his best style. In the staging of show-birds Mr. Maxwell stands out by himself, and his birds always show that with proper attention and feeding no cruelty whatever is involved in keeping birds in cages. His other exhibits in this class were a fine Stonechat, 1649, H.C., and a Wren, 1648, unnoticed. I failed to see why this latter bird was not in the money—it was in perfect feather, beautifully shown, and in my opinion better than 1652, Snell, another Wren, which won 2nd. This latter was a beautiful little bird, but I prefer 1648 of the two. 1657, Gough, 3rd, a grand Missel Thrush, looked well. 1655, Stockhausen, V.H.C., a good Greater Spotted Woodpecker, referred to above. 1660, Howe, V.H.C., a very beautiful Blue Tit, well worthy of his card, and a bargain at catalogue price; no chance to be higher in such company. A good Nuthatch, Sampson and Exton, was H.C. 1659, a Lapwing, is surely not a cage bird, and was very rightly passed without a card. A curiosity, as an exhibition bird, in this class was a common House Sparrow, and there were also a Hedge Sparrow and a Tree Sparrow. A suggestion to the L. and P. O. S.—why not take a hint from the success of the Greenfinch class, which this year had no less than forty entries, and provide a class for Any Species (not "Variety") of Sparrow? The plumage of the Sparrow is beautiful, if of sober colours, and we should see what some of our exhibitors could do with these familiar birds.

Class 117. *Migratory* (16). Showed us another fine team from Mr. Maxwell's bird room. 1st went to his old champion Wryneck, paler in colour than we have seen him; must have been run very closely by 1668, same exhibitor, one of the finest Redstarts one could wish to see. 1677, Hepwood, 3rd, a Spotted Flycatcher, which well deserved its position. This bird, like some other of the insect-eating birds in this class, and in Class 116, was looking for more insect matter in his food, 1678, Rothwell, 4th, a nice Nightingale; no chance to be higher in such competition. 1680, J. Brown, V.H.C., a good Fieldfare, but with a broken tail. 1681, same owner, V.H.C., a fine Redwing in perfect feather, but a little wild. 1675, Howe, H.C., a well-staged Blackcap outclassed in this company. Where is the old Crystal Palace class for these and Nightingales? 1673, Howe, a perfect Waxwing in the finest possible condition, passed without a card. This class, with Classes 115 and 116, afforded material for a day's study, but the gregarious instincts of the many friends one meets only at the annual re-union at the Palace rendered this impossible to anyone who was at all well-known, especially under the conditions of lighting in the new locale, which, while they were all that could be wished for during the day, rendered some of the birds invisible after the electric light was switched on.



A few Birds at the Zoo.

By James McDonagh.

Being a regular visitor to the Zoo, I see many new animals and miss many inmates that have joined the majority.

I have been there twice quite recently, and I was surprised to notice on my last visit how many birds had gone, that were looking well a short while ago.

The bird that I missed most of all was the Emerald Bird of Paradise, which was kept in the Insect House; I am sure all who saw it will be sorry to hear that it died of "tubercullus" as the keeper called it, early in the year; it had been ailing for some time, and it never got accustomed to its food; it had a slight injury under one wing, probably caused by the natives while effecting its capture.

In the same house there were two beautiful Mynahs, one of which could just speak a few words; these birds evidently do well in captivity, as one of them has been in the Zoo since 1885. The yellow patches round their necks were especially brilliant. Their food consists of meat very finely chopped up, fruit, and rice, and a little maw seed is given occasionally.

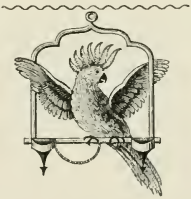
Next to the Mynah was an Indian Pitta, a curious looking bird, which gives one the impression of having no tail. The breast is fawn-coloured and its back is very brilliant. The Natural History Museum has four or five beautiful specimens of this bird, but their colouring is very much more gorgeous, so they must be of the insular species. Pittas are occasionally seen in the market, and they generally fetch about £4 each.

The next cage contained a Yellow-eyed Babbler from China. It was looking very healthy and was most affectionate and tame, and if you put your finger in the cage it would immediately come to you and ruffle up its feathers to allow you to scratch its poll. The other birds in the house consisted of two Japanese Tits, which were looking far from well, and two varieties of Woodpeckers, the White-headed Woodpecker and the Golden-backed Woodpecker. The former is quite an old resident and still looks very well

Any very rare specimen of bird brought to the Zoo is generally put into the Insect House. I mention this because many people leave that house out, and mark it as uninteresting. The parrot house was, as usual, noisy—but the noise in the afternoon is many degrees worse than it is in the morning. The greater number of birds in this house belong to the order of Psittaciformes, and many of the specimens are very good, including many rare Lorikeets and Parrakeets, There was only one pair of Undulated Grass Parrakeets. and their colour was of a yellow-green, probably it is a variety, but I have never seen them quite so light before. None of the birds in this house ever seem to breed, although most of them are in pairs. Just recently two of the Ornamented Lorikeets laid eggs, but the Society did not take the trouble to see whether they were fertile or not.

The finest bird in this house was undoubtedly the Yellow-winged Sugar Bird, now looking at its best, with its glossy black and Oxford blue colouring and one patch of Cambridge blue on its head. The under-surface of the wing is yellow. Its food consists of fruit, rice, chopped up carrot, soaked bread, and an occasional mealworm.

Close to this bird were four or five cages containing Tanagers : none were looking very well, and the only representative of the Superb Tanager died a short time ago. The Blue-winged Siva and the Silver-eared Mesia were in very good form. The two Bell Birds have been removed to larger cages, and their note can be clearly distinguished above the perpetual noise of the Parrots. The note much more resembles a hammer strking an anvil than a bell ringing. The Touracous, Toucans, and Troupials or Hang-Nests, are always well represented. The Finches were not so good and not so numerous as usual—which is not surprising, considering how small their cages are. The only three species which were at all worth admiring were the Parrot Finch, two Bicheno Finches, and three Gouldians. Being a cold day and rather dreary, most of the birds in the large aviary were inside, but nearly all the Pigeons were out, and many Cardinals. A Red-crested Cardinal had escaped that morning through a hole in the netting, but had not flown far and was always hovering round the aviary. Curiously enough, though birds sometimes escape they never fly far and are generally caught again. Near this aviary is the *post-mortem* room, and here there are many skins of different birds that have died in the gardens: they are always kept there for reference but, needless to say, the beautiful colouring of the living specimens is lost. I mention this, because anyone can get leave to examine the skins, and study the different species and varieties.



Reviews.

"*The Bird*," *by Jules Michelet, with* 210 *illustrations, by Giacomelli. Thomas Nelson & Sons, London and Edinburgh.*

" 'L'Oiseau,' or 'The Bird,' was first published "in 1856, ... a work . . . . which few "writers have surpassed in grace of style, beauty of "description, and suggestiveness of sentiment. " 'L'Oiseau' may be briefly described as an "eloquent defence of the Bird in its relation to man, "and a practical exposition of the attractiveness of "Natural History. It is animated by a fine and "tender spirit, and written with an inimitable charm "of language."

Such is the opening sentence in the translator's preface, and accurately describes, in a few words, the manifold beauties of the book. And here let me at once confess that this is less a review than an appreciation, of the most charming work dealing with the life of our feathered friends it has ever been my pleasure to possess.

Jules Michelet, the author, was a Frenchman, and it is, perhaps, the peculiar gracefulness of his native tongue, that has enabled him to express his thoughts with such delicate touches of light and shade. He appears to have sunk his individuality in that of a bird, and as a result has given us all the joys, sorrows, and aspirations that animate and direct the feathered race. But though poetical, Michelet is none the less practical, and he has dealt with each and every side of a bird's nature and existence. With him we visit the King Penguins in the frozen North, the Humming Birds in the tropics, the lordly Eagle, the industrious Weavers, the giant Condors, and the tiny Sun Birds: from regions of ice, to regions of burning heat—from the greatest to the least: he knew their habits and their wants, their life and their death, and every incident is portrayed with the hand of a master and the mind of a genius.

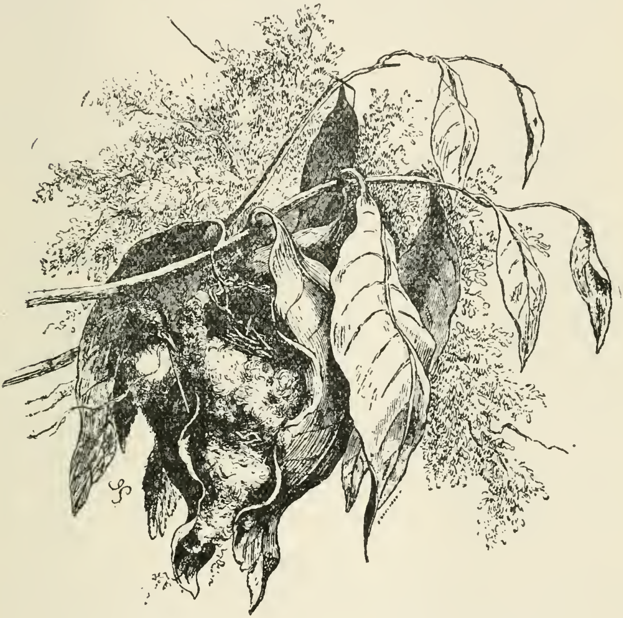
In endeavouring to choose an extract which will fittingly illustrate the nature of the work, one is somewhat at a loss to know which to take from such a rich store. Listen to his description of the Frigate Bird.

> “. . . at an elevation of ten thousand feet royally
> “ floats a little bird . . . It is the Ocean-Eagle, first
> “ and chief of the winged race, ... the lord of the
> “ tempest. the scorner of all peril—the man-of-war or
> “ frigate bird. We have reached the culminating point
> “ of the series commenced by the wingless bird. Here we
> “ have a bird which is virtually nothing more than wings:
> “ scarcely any body—barely as large as that of the domestic
> “ cock—while his prodigious pinions are fifteen feet in
> “ span. The great problem of flight is solved and over-
> “ passed, for the power of flight seems useless. Such a
> “ bird naturally sustained by such supports, need but
> “ allow himself to be borne along. The storm bursts; he
> “ mounts to lofty heights, where he finds tranquility.
> “ The poetic metaphor, untrue when applied to any
> “ other bird, is no exaggeration when applied to him:
> “ literally, he sleeps upon the storm. When he chooses to
> “ oar his way seriously, all distance vanishes, he breakfasts
> “ in Senegal: he dines in America . . . . . envy
> “ seizes us, when amid the glowing azure of the Tropics, at
> “ incredible altitudes, almost imperceptible in the dim
> “ remoteness, we see him triumphantly sweeping past us,
> “ this black solitary bird, alone in the waste of heaven.”

Of the Weavers, a long account is supplemented by an extract from Levaillant respecting the Sociable Weavers (*Philetærus socius*) and their wonderful nests, of which we may be able to give our members a description in a future issue.

Michelet was fortunate in having a most exquisite and lifelike delineator of birds and their surroundings, to illustrate his work.

Giacomelli excelled in depicting birds in their native haunts. In themselves, the sketches are worthy of being prized as affording glimpses of bird life in all conditions and under all climes.* Allied, as these are, with a perfect literary style, they comprise a work which has long been the pleasure of the bird-lover, and the delight of the poet and idealist. At times, as one reads, one falls into a reverie; and the thoughts, untrammelled by time or space, roam over distant seas and far off lands side by side with the wizard Michelet. And then, recalled to life by our surroundings, we long for the power of the Bird, and echo with wistful earnestness the solemn and beautiful words of Rückert.



From "THE BIRD."   THE TAILOR BIRD.

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*We hope to obtain permission from the Publishers to reproduce some of these gems of art in our Magazine, from time to time.

"Wings! wings! to sweep
O'er mountain high and valley deep.
Wings! that my heart may rest
In the radiant morning's breast.

"Wings! to hover free
O'er the dawn-empurpled sea.
Wings! 'bove life to soar
And beyond death for evermore."

J. A. SWAN.

"*Parrakeets, being a practical Handbook to those species kept in Captivity*," *by David Seth-Smith, F.Z.S., M.B.O.U.*

We have received Part 4 of this excellent work, now appearing in serial parts. The Parrakeets dealt with are the Crimson-wing and the King, the genus *Pyrrhulopsis*, the Love Birds, and the Hanging Parrakeets, while a beginning is made with the *Platycerci*. There are three excellent coloured plates, one (of Hanging Parrakeets) by Mr. Grönvold, and the others (figuring the Pennant's, the Yellow-rumped, and Brown's Parrakeets) by Mr. Goodchild. The rampant attitudes of Mr. Grönvold's birds are not to our taste, but his delineation of the plumage is skilful.

Mr. Seth-Smith considers the Crimson-winged Parrakeet a delightful and desirable species, but he has not found it a safe companion for smaller birds.

> "It is a moderately hardy species when acclimatised, al-
> "though of course it needs some warmth during the winter
> "months in this country. Some people boast of keeping
> "birds which hail from hot climates, in outdoor, exposed
> "aviaries during the winter months; but although many
> "birds will exist under such conditions, they feel the cold
> "keenly, and the practice is little short of cruelty."

The King Parrakeet is described as "a somewhat lazy and uninteresting bird."

Both the Crimson-wing and the King have bred several times in this country.

The following account of the nesting habits of the true Lovebirds is very interesting.

"Parrots, with very few exceptions, select a hole in some "tree-trunk or limb, which has been formed by the decay "of the inner part of the wood, in which to rear their "brood, the great majority making no nest whatever, but "merely laying their eggs on the bare decaying wood. "The true Lovebirds, however, are not content with so "rude a bed for their offspring, but carefully construct a "soft, warm nest, with fine strips of the pliant green bark of "trees, which is peeled off by the female by a succession "of nips as she passes her beak along sideways. Having "secured a strip of about three inches in length, she gives "it a nip in the centre to bend it into a V-shape, and "turning her head and bending her back, she tucks it "away under her somewhat lengthy upper tail-coverts. "This process, of which the present writer has frequently "been an eye-witness in the case of *Agapornis roseicollis* "in captivity, is continued until a considerable quantity "of material has been collected, when the bird flies off, "looking like an animated ball of hay, to her nesting hole, "into which she climbs by the aid of her bill and feet. "The site selected for the nest is generally the hollow of a "tree, as in the case of other Parrots, but according to "Anderson, one species sometimes takes possession of the "large nests formed by the Social Weaver-birds, in which "it doubtless forms its own nest.

"The reason for the adoption of the remarkable method "above described of conveying the material to the desired "spot is not far to seek. Parrots of all kinds use the bill "nearly as much as the feet in climbing, and if this is "occupied in carrying a quantity of material, the bird "would have great difficulty in climbing into the nest, "which is generally situated where it would be impossible "to reach it without the use of the bill as well as the feet.

"In captivity a box, say six or eight inches square, with "an entrance-hole from one-and-a-half to two inches in "diameter, answers well as a receptacle of the nest. It "should be hung in some partially hidden corner of the "aviary, at a considerable height from the ground. "Green branches of willow or poplar should be supplied, "the bark of which will be stripped off to form the nest; "otherwise the woodwork of the aviary itself will be "attacked."

All our members who are interested in the Parrot tribe should subscribe for "Parrakeets." It is published by R. H. Porter, 7, Princes Street, Cavendish Square, W.

Correspondence.

THE ROSE-BREASTED COCKATOO.

Sir,—One often sees, and maybe hears, the cry "What parrot shall I keep? It must not be expensive, and it must be one which will become tame and affectionate." I have found the Rosy-breasted Cockatoo to meet all these requirements, and it is a bird that can be trained to do almost anything.

Mr. C. W. Gedney, in "Foreign Cage Birds," says "They are extremely hardy, and admirably adapted either as cage or aviary pets, for they are the most amiable of the Cockatoo family, and may safely be kept with any of the larger parrakeets, whilst their handsome plumage makes them attractive objects, either in a collection or in a cage."

The one I have is most affectionate. When it sees me, up will go its crest feathers and it will utter short cries of delight; should I pretend not to notice it, then it will try other means of persuasion, such as dancing, all the time making a peculiar grating noise with its beak; should this not be enough to attract me, then to the floor of its cage it will go, and with its grey- and rose-coloured wings pointed above it, will utter louder cries until I notice it. It will fly on to my arm from any part of the room, and will do the same in the open. Last summer, for a short time each day, I gave it its liberty, when it would fly from tree to tree but would never go far away. Could there be a nicer bird? I used to keep it in an unheated conservatory where it seemed to suffer from cold—so now it is placed in a heated aviary. It is not a screamer, although in almost every book the Rosy Cockatoo is described as such: no doubt the training has something to do with it. It would be interesting to hear if other members have found this species a screamer or otherwise.

Mr. Gedney gives a full account of how he bred these most charming birds.

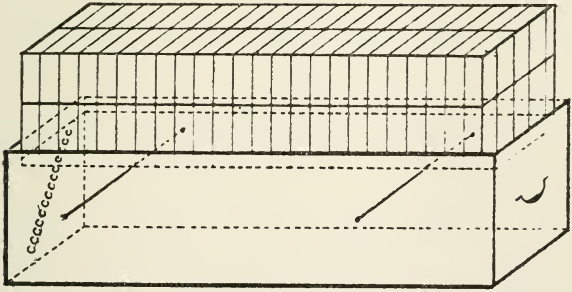
C. Castle Sloane.

BIRDS IN NIGERIA.

THE following reply was sent to a member who is proceeding to the Niger, and desired information as to the birds of the country and hints on capturing birds and bringing them home:—

Shelley's "Birds of Africa" is practically the only book, but it is not complete yet (only three volumes are out) and as it is two guineas a volume it is much too expensive for practical use. I believe there is a French book (by Rochbrune, I think) "Oiseaux de Senegambie," but it is not considered very accurate, and would in any case be of little use for Niger birds. Within the last two years Capt. Boyd Alexander, the chief authority on Nigerian birds, has written several articles upon these birds in the "Ibis," and if descriptions etc. are wanted, you cannot do better than get the numbers of the "Ibis," in which they appeared. I am sorry I cannot just now name them, but they are easily found out.

As regards traps. I should think trap cages would be absolutely useless, and if the Nigerian natives are like the Gambian, there will be some among them skilled at trapping and possessed of very ingenious clapnets, which look clumsy but work well in their hands, though a white man would be helpless with them.



As to cages. Wire fronts, made to fit packing cases, could be easily taken out, but there are several objections to the plan, chiefly the difficulty of cleaning out such makeshift cages. I think a better plan is to have wire cages made without bottoms, to fit into wooden cases. When going out, the wire tops are inverted and form an inner wire lining to the case, which can be used for baggage etc. When in use as a cage, the wire top is put the right way up. fastened to the wooden case (which now forms the lower half of the cage) by a couple of chains which just allow it to come within an inch of the top, and supported on wires driven through the wooden side. For transport the wire top is let down to the bottom of the case, thus reducing the size of the package by half. Whatever wire is used, it must be galvanized, as it will otherwise rust in no time; and a narrow guage, "mouse-proof" is also essential, both to increase the strength and keep out snakes, centipedes etc. For water, the best thing is an enamelled iron mug fastened to the wire near the top, which can be filled without opening the doors—as the birds so easily escape, and if a black boy has charge of them he must never be allowed to open the door, or most of them will very soon vanish.

I have had two cages made on the above plan for my next visit to the coast (each 3ft. long, 1ft. 6ins. wide, and 10ins. high) to fit into cases half an inch wider each way, so that they form cages 20ins. high and hold about 200 birds apiece easily--that is, for a short time.

As regards getting cages knocked up out there, I should think it would be difficult, that is, for any large number of birds: for one or two, the native-made cane cages would do, but when it comes to larger cages one gets things like coffins made—as I know to my cost, having had to cross London with three, on three different cabs, with my 800 Gambian birds.

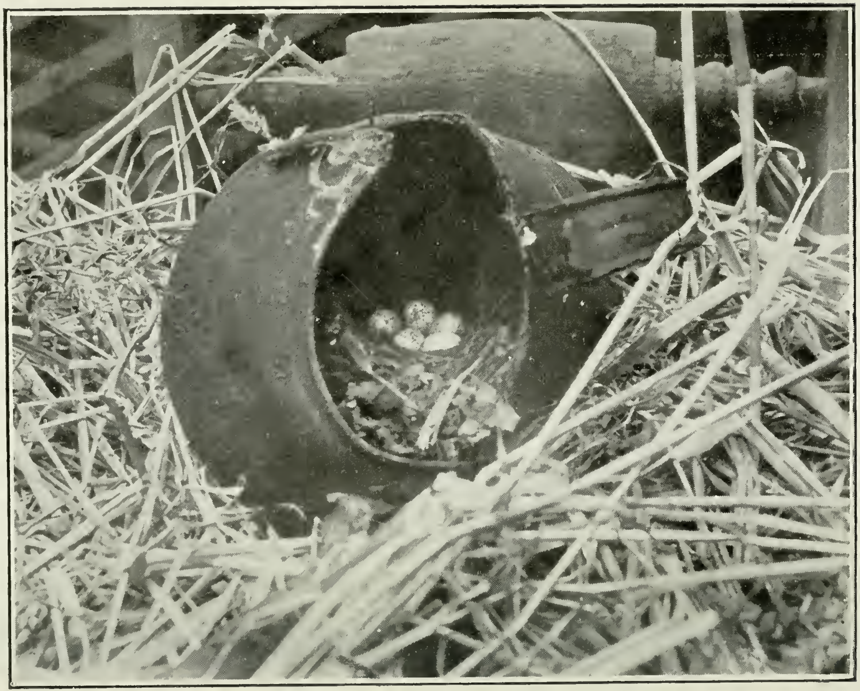
Another essential is a coffee mill to grind the koos (a sort of millet) on which one feeds the birds out there.

E. Hopkinson.

THE BLUE-WINGED LOVEBIRD.

The following letter was written in reply to a member who inquired "whether she should be wise in buying a pair of Blue-winged Lovebirds at 5/- per pair, and whether they are nice birds to have":—

The so-called "Blue-winged Lovebird" or Passerine Parrotlet, is a South American species quite distinct from the true Lovebirds. If you can obtain healthy specimens at the price named, they are cheap—though the species is largely imported at times. It is a very beautiful and desirable bird, but better adapted to the aviary than the cage, for the blue of the wings is only to be seen during flight, and it is generally timid and difficult to tame. Nevertheless, it was bred by the well known aviculturist Mr. O. E. Cresswell in a small bell-shaped cage, though his success was of course, in the main, a mere accident, which is not likely to be soon repeated. Canary-seed should be its principal food, with some spray or "Indian" millet, and occasional hemp-seeds. Green food is much appreciated.



A ROBIN'S NEST.

The Robin.

By S. A. Sandy.

Next to the House Sparrow, there is probably no bird better known and appreciated than our little red-breasted friend the Robin. Go where you may, in town or country, you will find him, during the autumn and winter months, appearing just as much at home in the small suburban garden (or in many cases apology for such) as in the more spacious grounds of the farm or country house. The plumage of this little bird is quite equal in beauty to that of many of our summer migrants which are far more prized by fanciers, and if it were not for the fact that our little friend is numerically strong in almost every district, and can be had for the mere catching or a few pence at most, he would be far more valued as an exhibition bird.

The adult male has the crown of the head, back, wings and tail olive brown; forehead, throat, and breast bright reddish orange, bordered with bluish grey, with the underparts white. Legs and feet brown, and bill very dark brown, in fact it might be said to be black. The length is about $5\frac{3}{4}$ inches. The general plumage of the hen is similar to the cock's, but the coloring is more dingy, and she is usually smaller and less attractive in her general appearance.

As regards food, during the summer months the Robin feeds in the same manner as the other species of small insectivorous birds, viz., upon flies, caterpillars, moths, ants, etc., but also shows a great partiality for small earthworms. In winter, when frost and snow are about and few insects are procurable, there is very little that comes amiss to the Robin. Bread crumbs, boiled potato, ants' eggs, meat, cheese, etc., being devoured with relish. In captivity these birds thrive well on the usual insectivorous diet, viz., ants' eggs, hard boiled egg, crushed sweet biscuit, or bread crumbs, well mixed, and moistened with grated carrot, with a mealworm now and again, or a few small earthworms.

Unlike most birds, the Robin frequently chooses very quaint places for its nest, which is amply borne out by the illustration in this number of "Bird Notes," from a photograph of a Robins' nest in the remains of an old watering can. Space does not permit of my giving instances of the many curious homes chosen by this little bird, but I can recollect, amongst others, an old boot, and a disused tea kettle. However, the majority of less eccentric pairs build in holes in walls, hollow trees, ivy, faggot stacks, etc., the nest consisting of moss, leaves, hair, and feathers. The young usually number five, and are spotted like young Redstarts, with the exception that they are without the chestnut-colored tail.

Cinnamon Robins are frequently heard of, but not often albinos—although last year there was a nest in the neighbourhood of Hatfield containing two white and two partly white and partly normal colour. They were described in "Bird Notes" for September by our member Mr. F. Turnber, who also told me of an incident he witnessed recently, which shows that if given a little attention Robins soon become exceptionally tame and fearless in their wild state. It was this: an old gentleman had been in the habit of digging over a little piece of ground so that the Robins which frequented the garden could get the worms. On one occasion he dug a few feet of ground over and then sat in an arm chair with his legs crossed. The Robin soon appeared, and, after taking his fill of the worms, perched on the gentleman's foot without shewing the slightest trace of fear.

As an exhibition bird, the Robin does not stand much chance in a mixed class for small insectivorous birds, as it would certainly be outclassed by such birds as Redstarts, Wagtails, Wrens, etc., and it is only at the Great National Show at the Crystal Palace that a Special Class is provided, and even this may soon be expected to share the fate of the Nightingale and Blackcap Class—which has disappeared from the Schedule, apparently for ever. Should any fancier, however, decide to keep a Robin—and he might do much worse—a large sprightly bird should be selected, with deep coloured breast and shewing plenty of bluish bordering. If caught in the autumn, say October, very little trouble would be experienced in "meating off." Having caught your bird, place him in a cage say 18in. long by 10in. deep, and 12in. to 15in. high, with the wires $\frac{5}{8}$ of an inch apart, and cover the front with some light material. Put in some hard-boiled egg and soaked ants' eggs, well mixed, and a dozen mealworms per day for the first two days, and then gradually reduce the quantity until in a week or so, if a proper diet of insectivorous mixture be supplied, mealworms need only be given as a luxury now and again. I prefer, however, to keep a Robin in an outdoor aviary, where he will do well throughout the year, and probably sing during the winter months when all other songsters are silent. It would not, however, be safe to turn any other small insectivorous birds into the same aviary except Blue or Cole Tits, Nuthatches, or Pied Wagtails. These species, as well as the seed-eaters, can usually take care of themselves, but Nightingales, Stonechats, Whinchats, and the like, would soon find more than their match in the Robin.

The Story of Bird-Death.

By W. G. Creswell, M.D., F.Z.S.

The circumstances attendant upon and conducive to the bills of mortality of our feathered friends are generally so little understood, that I propose under the above title to incorporate in every issue with my *post mortem* reports on the birds sent to me by my fellow members, either a short article on some common disease, or the result of some experiment undertaken by myself or my collaborateur, or else an attempt at a logical generalization from the many particulars at my command.

My earnest hope is that my humble efforts in this direction, representing as they do much labour and time spent in laboratory and study, will ultimately—though perhaps slowly—have the effect of dissipating much of the quasi-knowledge and erroneous opinion now current on these subjects among aviculturists, and which have either been handed down by tradition from mediæval and ancient times, or have been promulgated more recently by those who know but little, and in many instances nothing, of modern pathology.

To a great extent I am afraid this general haziness and ignorance is the fault of the medical and veterinary professions themselves. Very few of the more enlightened members of either of these bodies have ever considered it worth their while to "bother themselves" about birds, and so the result has gradually come about that, while only here and there can be found a competent professional adviser, the great bulk of the work has fallen of necessity into the hands of those who know very little indeed about drugs, and nothing, or next to nothing at all, about the bodies they pour them into.

For my choice of a title for these pages I must apologize to Mr. Pycroft and Sir George Newnes, since it is admittedly a paraphrase of "The Story of Bird-Life," under which name exists a most useful and charming little work.

GREY JAVA SPARROW, hen. (Mr. Dart). Died of acute pneumonia. An egg was in an advanced condition.

GREY WAXBILL, hen. (Mr. Dart.) The immediate cause of death was brain hœmorrhage due to a blow on the head, but in addition to this the bird had some congestion of the liver and left lung.

WEAVER, hen. (Mr. Swan). This bird died of inflammation of the bowels, combined with chronic congestion of the kidneys and liver.

CANARY, hen. (Mr. Dart). A fully developed egg had been ruptured when on the point of entering the oviduct, with the result of setting up a fatal peritonitis.

LAVENDER FINCH, hen. (Mr. Swan). The cause of death was hœmorrhage into the meninges. There was a localized bruising of the skull, evidently the result of injury.

BUDGERIGAR, hen. (Mr. Dart). On opening the mesentery, which was much congested, thickened, and very opaque, there was found to be a tumour which filled the abdominal cavity. This proved to be a multilocular ovarian cystic growth. It weighed over a quarter of an ounce. The oviduct was in the same condition as the mesentery.

GREY CARDINAL, cock. (Dr. Hopkinson). Liver and spleen were deeply congested; the stomach and intestines were thickened and inflamed. The liver and spleen were swarming with cocci, and the contents of the intestine showed great numbers of both cocci and bacilli indistinguishable from those of epizootic septicœmia.

BICHENO FINCH, hen. (Mr. Fillmer). The cause of death was egg-binding, the cloaca containing a shell-less egg.

GOLDFINCH, cock. (Mr. Horton). All the internal organs connected with alimentation were congested. No septic cause of this was discoverable except a few cocci in the intestines. What about too rich a diet while confined in a cage, with perhaps only an occasional and perfunctory cleaning of water vessels?

PARRAKEET, hen. (Mr. Dart). Inordinately fat. Liver very congested. Intestines dark-coloured and hyperœmic.

Their contents showed swarms of septic bacilli. The excreta, therefore, would form a ready medium for infecting other birds. The spores of this bacillus are everywhere common and would find a congenial environment for development in either dirty drinking vessels or animal food.

BUDGERIGAR. (Mr. Wilson). The cause of death was congestion of the brain, mechanically caused by the pressure on the jugular vein of a large fatty tumour weighing 65 grains and filling up the angle between the neck and the anterior portion of the sternum.

BENGALI, nestling.* (Miss Brooksbank). Cause of death obscure. It was fat, but died probably of hunger and starvation, as the stomach was quite empty, and the intestines partially so.

PENNANT'S PARRAKEET, cock. (Mr. Salter). This bird died of biliary congestion of the liver and septic blood poisoning. The contents of the cloaca and intestines were swarming with both cocci and septic bacilli. In addition there was in both lungs alike a large tumour, the nature of which can only be determined later on after hardening, etc. I may say, however, that there were no tubercle bacilli present, in either the lungs or any other of the tissues, and that on various grounds I at present consider the tumours to be cancerous.

REDRUMP, hen. (Mr. Wilson). Acute infectious septicœmia. The contents of the crop and intestines, and also the lung exudation, were swarming with septic organisms.

LINNET, hen. Three years old, and caught as a brancher. Last summer this bird was caged up and fed for eight weeks nearly exclusively on inga seed, having only a little canary seed occasionally. She was then put back into an exposed out-door aviary (all wire except the roof) where she remained till February 17th last. On that date she was caged again and fed from time to time with (human) tuberculous matter intimately mixed with her food and water. On May 3rd she was killed by a cat, who knocked the cage down and inflicted a small wound in the region of the left kidney. *P.M.* appearances: Well nourished, with subcutaneous deposit of fat in the usual places and

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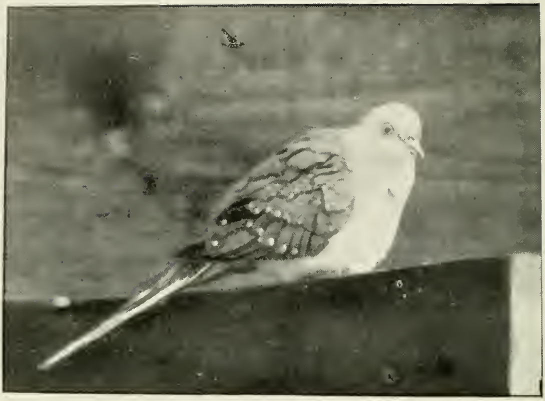
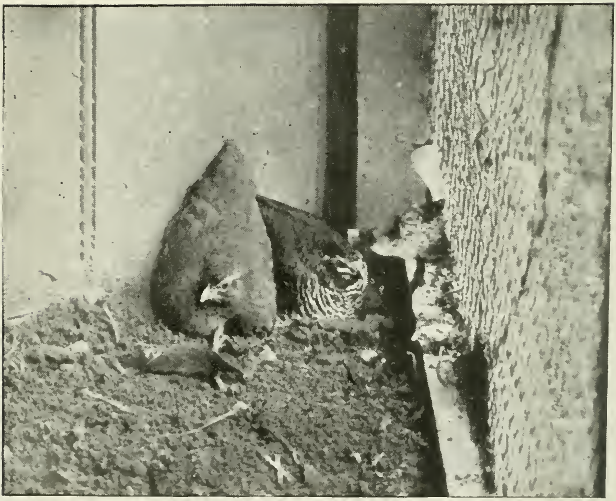
* Since writing the above report a more detailed examination of the slides has revealed the presence in the liver and intestinal contents of some giant forms of bacilli,—W. G. C.



THE DIAMOND DOVE.

Geopelia cuneata.



THE JUNGLE BUSH-QUAIL.

Perdicula asiatica.

(MALE & FEMALE).

From Photographs by MR. DAVID SETH-SMITH, M.B.O.U., F.Z.S.

To face page 63.

also in the mesentery. The left kidney was lacerated and there was a large clot of healthy blood lying on it, this being the cause of death. All the organs and tissues and contents of the cavities of the body were normal and free from any kind of disease, as shown both macro- and microscopically. One or two pieces of sharp grit were in the intestine. Contrary to the usual opinion, which is that the grit only escapes from the gizzard when ground to impalpable powder, these good-sized fragments are always present in the intestines, having escaped along with the ground-up food.

PARSON FINCH, cock. (Rev. R. H. Wilmot). This bird died of septic inflammation of the bowels and liver. The intestines contained septic bacilli in great number.

The Diamond Dove.

(Geopelia cuneata).

By Miss R. ALDERSON.

THIS sweet little Dove has become much cheaper in the bird market lately. A few years ago its price ranged from 23/- up to about 30/- a pair, while just recently I saw some pairs offered for, I believe, about 10/- each. The Diamond Dove is also called the Graceful Ground Dove, but the former name is the one it is generally known by. Its habitat is Australia, and it is mentioned by both Sturt and Gould in their accounts of their travels in that country.

The Diamond Dove is a tiny little bird, very dainty and elegant, its long tail making it look larger than it really is. In colour it is a soft grey, the under parts, and under feathers of the tail, white ;

the larger quill feathers in the wing dark grey, and the remainder of the wing covered with tiny white spots very distinctly marked. These spots show up very prominently on the grey background, and I suppose it is from this that the dove takes its name. The iris is blood-red, and the naked skin round it is also red. In some specimens I have heard of both iris and skin being greenish yellow, but I cannot say I have ever seen this colouring myself. The feet and legs are delicate flesh colour. The beak is brownish. Most people who have kept or observed this dove agree that the hen is a much browner shade and smaller than the cock bird. I have found different specimens vary greatly, the blue-grey shade of colouring I consider much the prettiest.

My birds made a little nest, and sat in it steadily for many days. I hoped they might have eggs, but I was disappointed, for the nest turned out merely for "squatting" in. The cock Diamond Dove looks very pretty when making love to the hen. He runs after her raising and spreading his tail like a Peacock, and bobbing up and down as he coos.

I never kept more than one pair of Diamonds at the same time, but Dr. Butler, who had two pairs, found them very quarrelsome with each other. Indeed, I think this is the case with most small doves: they are unwearying in their attacks upon each other, if there are more than one pair in the same aviary (and *sometimes* are so cruel as to do each other serious injury), especially in the nesting season.

The Diamond Dove has been successfully bred by several well known foreign bird keepers in England. The eggs are white, and two in number. Bits of grass, hay, heather, and the withered green of bulbs make suitable nesting material. Unfortunately, as so often happens in breeding doves, the parents are given to starting a second nest before they have well finished with the first brood, with the result that the latter often dwindle and die through want of proper attention.

The Diamond Dove should be fed on canary and millet in summer, with hemp now and then in winter. Most small doves are very fond of spray millet. The smaller kinds are not so hardy as the larger species, and it is safer to keep Diamond Doves (and others of the same size) in a heated place for the winter. I keep a good many species of foreign doves, and always look on them as most interesting and satisfactory birds to keep, and this for several reasons: they keep in nice plumage, are mostly very hardy and healthy, seldom ailing anything, and readily take to confinement. One pair of freshly imported doves I have, began to nest within a month after their arrival, and have practically never stopped nesting since. Small birds can be kept with doves in perfect safety; it is only with each other that doves are sometimes quarrelsome, and even then, *as a general rule*, nothing *very* serious happens to the combatants, beyond loss of plumage.

The Jungle Bush-Quail.

Perdicula asiatica.

By D. SETH-SMITH, M.B.O.U., F.Z.S.

THIS pretty little quail seems to be very little known to aviculturists, for, although it is now and then imported into this country from India, the dealers never know what it is, and advertise it under all sorts of fancy names. It is about 6½ inches in total length, of a warm reddish-brown colour, the male having the breast barred with black and white.

I have kept two pairs of this species, but they were extremely timid, and not especially interesting. They do very well in an out-door aviary during the summer months, but cannot stand much damp, and should therefore be kept indoors during the winter. Mine never made any attempt to nest, but then I was not able to give them a large aviary with living grass, which is essential to all the more timid quails if they are to breed.

The Jungle Bush-Quail inhabits India and Ceylon, frequenting, as Hume tells us, "moderately thick forests and jungles, hills, ravines, and broken ground, not too deficient in cover, and rich cultivation, if not in too damp and undrained situations, from near the sea-level to an elevation of four to five thousand feet." The nest is said to be composed of roots and fine grass, and situated in a slight hollow, under a tuft of grass or a low bush. The eggs, Mr. Ogilvie-Grant informs us, are "slightly pointed ovals, varying in colour from creamy- to brownish-white; five to seven in number. Average measurements 1·0 by 0·85 inch."

I have also kept the nearly allied Marbled or Rock Bush-Quail (*P. argoondah*) which is also an inhabitant of India. Its habits differ in no way from those of its congener.

British Birds: How to Keep them for Song and Exhibition.*

By Arthur Jones.

I will commence by explaining what my aviaries and bird-room are like; they are roughly made, as you will probably imagine when I tell you I am my own architect and builder. There is a room built out at the back of my house, and roofed with zinc; on this roof I have built my bird-room. There are walls on three sides of it, and the front I have made with four large windows.

The roof I made with four large shutters, and covered the same with zinc; these I can take down and put up, according to the state of the weather; there is also a wire roof, so that when the shutters are down the birds have the benefit of the fresh air. I have gas and water laid on; the gas I use for heating purposes, by placing a kind of metal urn over it; the urn has a pipe in the top which carries off the fumes through the roof. When I want the gas for boiling eggs, I take away the urn, and use an atmospheric gas boiler. The room has shelves round for the cages, also four mouse-proof aviaries.

My aviaries are all connected, and the one adjoining the bird-room has a roof on a level with the bird-room roof, and is about 20ft. high from the ground; the roof is made with wire, a small mesh wire inside, and a larger mesh 7in. above, to keep the cats from reaching the birds at night, when my Scotch Terrier is asleep. Two pigeon-holes are cut in the glass of the bird-room, to enable the birds to fly into the aviary in the yard, and there are large zinc-roofed box cages on the wall to give the birds shelter and warmth. Another lean-to aviary adjoining is 6ft. high, 5ft. deep, and 21ft. long: this has a double wire front, and tarred wood roof; adjoining this is another about 12ft. square, covered with corrugated iron, with wire on two sides, and brick walls on the other two. The aviaries can be patitioned off into five by closing the sliding doors over the pigeon-holes, or made into one, as necessity requires. At the present time they are made into one, and the birds are all flying together, hard-bills and soft—except the Magpie, Jay, American Mocking Bird, and Blackbird. These birds are all tyrants in an aviary with others, also the Chaffinch and Robin at times. It is natural for the two first-named to be so, for to some extent they are carnivorous, and will kill and eat mice almost as quickly as a cat. A caged Magpie of mine escaped into the aviary and killed a Starling by pecking him through the neck, and then pecked off all the feathers by way of amusement. I might add that my British birds, except the migratory ones, are out in the open all the winter, and are never any the worse for it.

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* This article contains the substance of a paper read before the N. B. B. & M. C. some years ago, but has been specially revised by the author for these pages.—Ed.

My appliances are gardener's and bricklayer's trowels, bass and hair brooms, large and small cage scrapers, crumb brush, dustpan and hand-brush, garden rake, hoe, shovel and spade.

Experience has taught me that the best soft food is not the food you buy ready prepared, but what you prepare yourself. Some desiccated yolk of egg was analysed a short time back by a friend of mine, and found to contain lard, pea-meal, and egg-colouring; but, worse still, the yolk itself was bad. I need hardly say his Nightingales would not touch it. The preserved yolk they had previously been fed upon they ate and thrived on. I mix my food in this way: I put three hard-boiled hen's eggs into a bowl, crumble bread of about the same bulk, grate a small portion of carrot, stir up well together with a steel fork, afterwards lightly stirring in ants' eggs and crushed hemp. I prepare this fresh every morning, and I find it keeps all the insectivorous birds in health and song. Some of the birds leave the ants' eggs, others leave the hemp, but they all do well on the preparation. I give a few mealworms as well to the more delicate birds. For the seed-eating birds I give best hemp in one hopper and best Spanish canary in another, and the following mixed seed I throw on the sand and grit: coarse oatmeal, linseed, rape, canary, hemp, maw, and niger—(oatmeal is good for Larks). This stimulating diet needs modifying for birds which are caged. Hemp and maw must then be given very sparingly. Give groundsel, plantain, chickweed, watercress, lettuce, as often as you can get it, also turf with young clover in it, for your Larks.

There is one very important thing I think fanciers sadly overlook as regards their birds' well-being. We want to keep our birds amused and interested; this will greatly assist in keeping them in good health and song. Put a tree of privet in your aviary occasionally, or a branch of hawthorn. After Christmas you can buy a fir tree cheap. If you do this you will find your Goldfinches as happy as can be, pecking off every bit of green, whilst the Crossbill is busy barking it, and the Hawfinch breaking off the small branches; in fact, every bird is delighted with this new interest—and it is natural that they should be, for in their wild state they are continually occupied. In summer they have the delights of nesting. When these are over and winter comes on, every species, in some degree, wanders about the country—the Goldfinches are in small flocks, flying about looking for a field of thistles; the commoner finches pay a visit to the farm stack-yards. The Owls visit the barns for mice; the Raven is flying along, uttering his miserable croak, looking for a dead lamb for a feast. The Jays are foraging the woods for acorns and wood-nuts hidden by the squirrels for food for the winter. I could go on multiplying these country scenes which I am so familiar with, if space would permit. In aviaries, birds get none of this roving life, their food being already found them, so they should have diversions provided in order to keep up their spirits and vivacity.

I have treated of health, and this has all to do with song, for if the birds are not healthy, you will get little or no song from them. They must not be kept on too low a diet—their food should be nourishing and stimulating, but not fattening. Young birds, especially Thrushes, need a teacher. Place them where they can hear your best singing old bird. My best singing young Thrush came from a cottage just beyond Guildford, a place where Thrushes abound.

There is a subject I have never seen dealt with in books, and I have not the ability to enter into it fully, but many of my readers have undoubtedly noticed how much more keen and acute some of the senses are in birds than they are in man For instance, the keenness and quickness of sight in the Swallow in catching flies on the wing, the long-sightedness of the Eagle and the Hawk, how they can detect the smallest bird or animal moving on the ground from an immense height. The quickness of hearing we perceive in the Jay, Magpie, Woodpecker, and Cuckoo.

Now I have come to the subject of colour in the wild birds: the beautiful colour and sheen which we are unable to maintain in confinement, even in aviaries. Dr. Bradburn maintained that it is the country life and fresh air that gives the wild bird his lovely colour. Darwin ascribes all the different colours of the various birds to variations in their diet, and hence I contend that the maintaining of the lovely natural colour and sheen of our

British birds is not to be secured by gorging with some particular substance at moulting time, but by regularly supplying them with such seeds as they ate when wild, which will of themselves maintain the constituents of the colouring. Iron, I believe, enters very largely into these: iron a bird would get in his water and grit. Sulphur, I understand, is another important factor in colour, and is largely present in rape and canary seed. I should like to see the matter solved, so that we might give our birds a natural colouring diet instead of cayenne, which has been proved to be injurious by Professor Woodroffe Hill, Dr. Butler, Dr. Bradburn, Jerome, and others. I have, furthermore, witnessed two cases of melanism lately; one was a Song Thrush, changed almost black through being fed on crushed hemp seed and bread, and another a Sky Lark turned black-and-white, the darker markings of his plumage black, and the lighter markings white. The Lark, I may say, did not live long, probably through being fed on little or nothing but hemp and bread. Hemp is good for soft or hard-billed birds, in moderation, but not as a staple diet.*

Washing birds with a good soap is undoubtedly necessary in a dirty town like London, where the soot falls down on one's birds like so much black snow, so that the dirt becomes almost ingrained in the feathers; but beyond this I never go; all artificial dyes, colourings, and dressings I utterly abandon and abhor, whether given as a food, or for outward application. I prefer seeing the birds in the colour their Creator endowed them with, and, if we find it impossible to keep up the beautiful colouring in confinement equal to nature's true standard of perfection, let us wait until some non-injurious food is discovered. May the N. B. B. & M. C. never lack true- and kind-hearted fanciers, who will think more of their birds' health than they do of medals and money.

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* I gave a lovely Song Thrush to the keeper of the Victoria Park Aviary, as it was rather wilder than I liked: now this bird is almost black, its principal food being hemp and barley meal. It is marvellous what an effect diet has on a bird's colour.

I must now bring my paper to a close with the hope that something will be done to influence judges to give the prizes to birds in their natural state of plumage, rather than to birds palpably colour-fed. If only something is done, I shall consider my time has been well spent in writing this paper.

Consanguinity.

By J. Kershaw.

THE word consanguinity is of Latin origin, and is derived from *con*, with, and *sanguis*, blood, and the meaning is, "the quality or state of being related by blood; nearness of kin; descent from a common ancestor."

Consanguinity is a most important element in hybrid breeding—and to hybrid breeders this article is addressed. I will try to explain to my readers some of the steps which will bring them as near as possible to the object of their ambition, namely, a clear mule.

If you wish to start a strain for breeding light mules, I counsel you to go to a breeder of singing Canaries and see for yourself if he has any good-sized birds of the Anglo-German cross—by preference a cross between a Cinnamon Norwich and an ordinary German songster. If he has what you want, obtain from him two pairs. The next point is to see that you pair them double yellow and double buff, as this method of breeding is essential to produce fixity of type. (I wish it to be understood that I am writing for the fancier and not for the breeder who aims at a money profit.) Pair these birds from generation to generation, for three or four years, as the strength of the birds will allow, and after that time be provided with fresh blood to introduce, a cock or a hen as the case may be, guaranteed to be the offspring of light-muling parents—or, failing this, put yourself in the hands of a respectable breeder of Cinnamon-marked Yorkshires, and ask him to send you a pink-eyed bird, warranted to be bred from double yellows. This admixture of good blood will probably do more towards bringing you to success than the close in-breeding which you have previously practised, as cinnamon blood has affinities to albinism, and, besides, it once more brings up the stamina of your strain, for in-breeding.

Now, possibly, the best course will be for you, if you have the opportunity, to take a nest of mules from the most sparcely-feathered of the hens, in order that you may see how far you are advancing towards your goal. Sparceness in feather is most important, but, so far as is compatible with this, select the largest birds, for further crossing. The reason why the largest birds should be chosen is that when in-breeding is carried far there is a tendency for the size of the birds to decrease, and if the strain is small to begin with it will gradually become diminutive—and very small birds are often sterile. When sterility is observed in the male bird, it is a sure indication that in-breeding has been carried too far, and that fresh blood must be introduced.

Great judgment must be exercised in the introduction of new blood. Though I advise new blood, it may injure the success of the breeder unless he is very careful in its selection. Farmers and gardeners change the seed and plants from one soil to another, and consider this essential to success. And so it is with sib-bred birds—the strain must be strengthened by the occasional addition of fresh light-muling blood, thus avoiding the deterioration of the size of the mules which must otherwise ensue.

In closing, I repeat that close in-breeding, continued for several generations, will certainly produce weakness and sterility, and my advice is, when fresh blood is wanted,—and this will be apparent from the size of the stock—be sure to procure it from a light-muling stock, whatever it may cost.

Birds in a Suburban Garden.

The following list of British birds supplied by Mr. Howard Williams, comprises those species which have been seen in his garden at North Finchley, within six or seven miles from the Royal Exchange. Those marked with an asterisk have bred in the garden.

*Blackbird
Blackcap
Bullfinch
Yellowhammer
*Chaffinch
Chiffchaff
Creeper
Crow
Cuckoo
*Hedge Sparrow
Fieldfare
Flycatcher
Goldcrest
Goldfinch
*Greenfinch
Hawfinch
*Jackdaw
Skylark
Linnet
Nuthatch
*Woodpigeon
Meadow Pipit
*Robin
Redpoll
Redwing
Rook
Siskin
*Sparrow
Sparrow (Tree)
*Starling
Swallow
Martin
Martin (Sand)
Swift
*Thrush (Song)
*Thrush (Missel)
*Blue Tit
Coal Tit
*Great Tit
Long-tailed Tit
Pied Wagtail
Yellow Wagtail
Garden Warbler
Owl (White or Barn)
Willow Warbler
Whinchat
Woodpecker (Lesser Spotted)
*Wren
Wryneck
Sparrow Hawk

Parrots and Parrakeets.

By Dr. C. S. Simpson.

(Continued from page 42).

The Cockatiel (*Calopsittacus novæ hollandiæ*) being a crested Parrot, may conveniently be mentioned here, though, in some respects, it somewhat resembles the Ground Parrakeets. It is one of the commonest and most hardy of foreign birds, and breeds in confinement as readily as the Budgerigar, requiring the same treatment as the latter. The cock is distinguished from the hen by his yellow cheeks.

The Lories and Lorikeets (*Loriidæ*). We come now to the last of our four sub-families, namely, the Lories and Lorikeets, which are widely distributed over Australia, the East Indian Archipelago, and Polynesia. These Parrots differ widely in their habits from the other members of the family *Psittaci*, and consequently require quite different treatment in confinement. No Parrots excel them in the exquisite beauty of their plumage, but none are more troublesome to feed.

The food of the Lories when wild consists of honey from flowers, soft fruits, and probably unripe seeds and insects, and I venture to think that a perfectly satisfactory substitute for these articles of diet, when in confinement, has yet to be found. Some species, however, of which the Blue Mountain or Swainson's Lorikeet is the best example, can be trained to eat canary seed and other dry seeds, and are consequently far less difficult to keep than those which will only take soft food. Even Swainson's Lorikeet, however, is apt to disappoint its owner by a sudden and unexpected death from apoplexy, just as the change of diet has been accomplished with apparent success.

I have repeatedly had the bodies of such birds sent me for dissection, and would, therefore, recommend amateurs to take *cum grano salis* the advice which is invariably given by the dealer when selling these birds, to "feed them on nothing but canary seed." I believe that all Lories and Lorikeets want a certain amount of soft food, and most of them require to live mainly on it, if they are to endure in confinement for any length of time.

The diet which appears to suit the Lories best consists of stale bread soaked in boiled milk, bananas, pears, grapes, and other ripe fruit, sponge cake, and maize boiled soft, or, if it can be procured, unripe milky maize. Canon Dutton recommends "dried figs soaked in hot water until they can be mashed into a pulp, mixed with soaked bun, and the whole made rather moist." The Lories at the Zoological Gardens have rice boiled in milk. Those which will eat canary seed should be fed partly upon it.

The cage in which a Lory is kept requires constant attention, especially if the bird be fed on soft food. A thorough daily cleaning is necessary, and a layer of garden mould or pine sawdust must be spread on the tray and renewed every day.

The Lories are more susceptible to cold than most of the other Parrots. A temperature falling not below fifty degrees is essential to maintain them in health. These birds, as a rule, are expensive, and, as may be judged from the preceding remarks, are by no means suitable for the novice. They are rather birds for the experienced aviarist.

With regard to the temper and disposition of the Lories, some authors describe them as the tamest and most affectionate of birds in confinement, and as exceptionally good talkers. Without in any way denying that this may be true of particular individuals, I am inclined to think that their good qualities have been, on the whole, exaggerated. One author attributes to the Purple-capped Lory the power to "throw its voice" to various parts of the room. Inasmuch as ventriloquists have no such power, the statement is obviously absurd. Though I have seen a good many Lories, I have never yet come across a talker, and most of those I have known have been noisy and untameable.

Swainson's or the Blue Mountain Lorikeet (*Trichoglossus novæ hollandiæ*) is the best known species. It is the hardiest of the Lorikeets and the most easily fed, as it readily takes to canary seed. It ought, however, to be supplied with a certain amount of soft food as well.

The Scaly-breasted Lorikeet (*Psitteuteles flavoviridis*) is another species which will eat seed. It is a rare bird. Its general colour is green with numerous transverse bars of yellow on the breast, producing a scaly appearance whence it derives its name.

The Ornamented Lorikeet (*T. ornatus*) is a very beautiful species, and was at one time very rare. The forehead and crown are violet, the upper parts of the body green (the feathers of the back with yellow stripes), the cheeks and throat are scarlet, the breast scarlet, with yellow stripes, the abdomen is green, and the beak red. It requires to be fed principally on soft food. Of the Short-tailed Lories, the Purple-capped (*Lorius domicella*) is the best known and the most easily kept, and may be fed partly on seed. It derives its name from the purple-black pileum or cap. Its prevailing colour is crimson, the wings are green, and there is a narrow yellow band across the upper part of the breast. Like the other Lories, this species is somewhat impatient of cold. The Ceram or Chattering Lory (*L. garrulus*) resembles the preceding, but is of an even more brilliant colour, and is without the purple cap. Other species which are occasionally seen in confinement are the Black-capped or Lady Lory (*L. lory*), the Red Lory (*Eos rubra*), and the Blue-breasted Lory (*Eos histrio*).

THE END.

The Nonpareil Bunting.

(Cyanospiza ciris).

By J. A. Swan.

SCARCELY any foreign bird has a more striking diversity of plumage than has the subject of this article. The dominant colours, in the cock, are vivid red, bright violet, and glittering green, interspersed in certain parts with golden yellow. When I add that the bird also has a charmingly soft and sweet song, I think I shall have said sufficient to induce any of our members who have not kept the Nonpareil Bunting, to try and obtain a specimen.

And this should not be difficult to do, for this is the beginning of the importation season, and every year thousands of these bright plumaged visitors are brought to our shores from the States, finding a ready sale among lovers of foreign birds. But beauty of plumage and sweetness of song are not the only desirable attributes the bird possesses. After being in its owner's possession a short time, it becomes delightfully tame and confiding, and readily takes fruit and worms from the fingers of whoever is accustomed to feed it. For this bird, while betraying no fear of those it knows, is deeply suspicious of strangers, and the choicest mealworm offered by the fairest hand is not enough to allay this feeling. Is not this evidence of reasoning powers—or is it what we call instinct? I prefer to believe it is the former, and that the bird recognises those it knows to be friends.

The Nonpareil, as it is generally called, is a semi-insectivorous bird (though so are all birds in my opinion), and in addition to seeds, should always have soft food every day. If this is not given, the bird suffers terribly from constipation, and will then have to be caged off, and fed on bread and milk for a week; to prepare this, pour the milk over the bread and then squeeze the latter until it is only moist. Under this treatment the bird will immediately regain its health, and the owner must try and stop a recurrence of the complaint. With the next specimen I obtain I am going to try a wholly insectivorous diet, for I believe this will be more suitable for it in captivity, than one containing seeds.

The Nonpareil is not expensive, 6/- to 8/- being a reasonable price—and, if properly looked after, is fairly long lived. A specimen I had, lived over three years in a large flight cage, and at the end died in my hands. Poor little bird! I was grieved over his loss—he was such a confiding little thing, and seemed to know, to the last, that I was trying to do him good.

The Nonpareil has been often bred in captivity—but the great difficulty is to obtain hens—which are comparatively seldom imported. They are bright green in colour—pretty in themselves—but overshadowed by the gorgeous plumage of the male.

No foreign bird is a greater adept at seizing the slightest opportunity to escape from its cage or aviary. Members will remember the instance given on page 26 of the present volume. Once, before I had learnt of this little trait, I had, when feeding the birds, turned for an instant to reach something, leaving the cage door open. There was a whirr and a whish of wings, and with a glad "tweet" away went a Nonpareil! Luckily he flew upwards and I knew he was safe, for the doors and windows were all closed. The door leading to the garden was open, however, and I had enough presence of mind to close this first before starting after him. There he was, at the top of the house, trying to get through the landing window! I was more careful afterwards, and did not give him another chance to repeat the performance, for the windows might be open the next time.

There is also another peculiarity of the Nonpareil. If kept in the house, the bright red on the breast fades at the first moult into a pale yellow which gets deeper each year, until at the third moult the colour is quite golden. A member, to whom I was talking some time ago, told me that at the *fourth* moult one of his birds came back into its original bright red, which is sufficiently interesting to record. I do not think this is generally the case, however, but perhaps some other members may be able to throw a little more light on the subject.

> " Considering the great beauty and the moderate
> " cost of this bird, it is astonishing that it has not
> " entirely ousted the noisy and more delicate
> " Canary as a popular cage bird."

Such is Dr. Arthur Butler's opinion, and a great many aviculturists will be disposed to agree with him.

British Bird Notes.

Mr. Dewhurst has a hen Greater-Spotted Woodpecker, which I, personally, know to be over five years old, and which has been confined in a cage most of its life.

Mr. Schmidt kept a Nightingale in a cage for over six years.

Mr. Cook also had, until quite recently, a Nightingale over five years old.

Our Member, Miss Janette Reeves, writes to me thus:—"I am very keen on hybrid breeding, and if this is a hot summer I hope to be very successful. I find Greenfinches make delightful foster parents for young Bullfinches, but when these are reared by Canaries they hurt the Canaries on each side of their beaks, and the places become so raw that the Canaries give up feeding them. I believe this is why Canary-Bullies do not live to go on the Show Bench. My Bullfinch-hybrids leave their nests when ten days old, the same as ordinary Bullfinches. I have even taken away the eggs of Greenfinches and given them young Bullfinches, and they have started feeding at once and reared them successfully. I believe Greenfinches feed on the same seeds and insects as Bullfinches. Of course you must have aviaries when Greenfinches are the foster parents. It is not safe to give them young Canaries to rear, as these have such soft beaks that, in feeding, the Greenfinches sometimes break their beaks, for a Greenfinch's beak is very hard, like that of a Bullfinch. I have already three Greenfinch hens sitting, two in Blackbirds' nests and one in a Canary nest box, and if I find that they feed their young ones well I shall give them Bullfinches, and take away the young Greenfinches. I do not take the young Bullfinches until they are four or five days old, as the first few days they require insects.

"One year I had a nest of six Linnet-Bullies, but I did not then know the value of them and so left them with their parents, who did not feed them properly, so I only saved one. Since that summer, which was a very hot one, I have never had more than two fertile Bullfinch-hybrids' eggs in a nest. Before I took in a fancy paper I actually sold hybrids for 3/- each, to people who evidently knew the value of them."

W. A. LOTT.

Correspondence.

COCKATIELS.

Sir,—I have just completed the rebuilding of my outdoor aviary, after removal, and, after being caged for three weeks, I have to-day turned out my pair of Cockatiels, in a snow storm.

This may sound rather risky, but the hardiness of these birds is surprising. They came into my possession in January, 1902, and were, I have reason to believe, newly imported, or had been kept caged indoors. I turned them out into an open aviary after three days, and the succeeding fortnight was about the worst during the winter, very cold, and a biting east wind all the time.

They did not avail themselves of the enclosed roosting shed, but for some time roosted in the open. The cock bird was never sick or sorry, but early in February the hen appeared ailing and became much worse the next day. I concluded she had taken a chill, as she sat on the perch with her head buried between her wings, a perfect picture of abject misery.

I decided it would be best to take her indoors by the fire, and went to catch her for that purpose. I had no difficulty in taking her from the perch with my hand, but she so promptly and forcibly returned the compliment by taking hold of my hand, that I let her go in a hurry and went away in disgust to find a piece of rag to tie round my fingers. The illness proved to be a case of egg-binding, as I found an egg on the ground the next morning, and the bird had then apparently quite recovered.

They then took possession of a four-and-a-half gallon cask I had fixed up, and had five nests of eggs during the season, most of which were clear, but they eventually succeeded in hatching two young ones in September last.

One nest of eggs was destroyed by a pair of Madagascar Love-birds, and the latter also effectually prevented my Budgerigars from breeding, the whole season through.

I also unfortunately possessed a pair of Ring-necks, and the hen was terribly vicious. I attribute the death of no less than thirty-two Finches to this bird alone—seven in one day. I have seen her kill a Weaver with a single blow of the beak, smashing the skull in. Needless to say, Ring-necks and Madagascar Love-birds will, in future, find no place in my aviary.

I have come to the conclusion that it is not policy to keep Finches and Parrakeets together, although I never knew my Cockatiels to interfere with even the smallest of the Waxbills.

The measurements of my aviary are: length 14 ft., depth 10 ft., height 8 ft. It consists of an enclosed roosting shed, a covered flight and an open flight,—the latter is turfed.

J. HARMAN.

BULLFINCHES.

SIR,—I wonder if any of your readers have ever had the same experience with Bullfinches as I am having this year.

I possess a dozen at present, mostly hens for hybrid breeding, and of that number no fewer than five are gasping and coughing very frequently, two, in fact, continuously. By gasping, I mean that the beak opens and shuts with every breath.

It cannot be the conditions under which they are kept that is causing this, for two are in a comfortable wooden birdroom, two in an outdoor aviary, and the remaining one (a cock) in our sitting-room. If anyone can suggest a reason and a remedy I shall feel much obliged.

Speaking about Bullfinches, how is it that they, more than any other cage-bird, are such seed wasters? Two of the cocks I have had recently would simply get through any quantity daily. They did not really eat much, but emptied their seed-box, all the same, in a very short time.

WM. C. CUNNINGHAM.

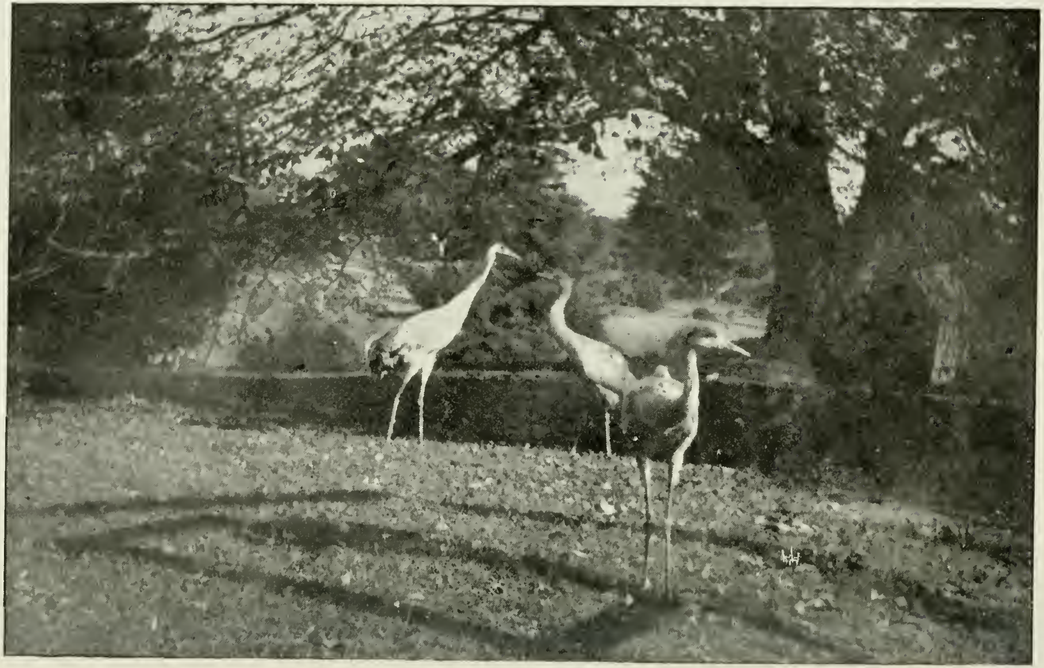
THE LATE EMERALD BIRD OF PARADISE AT THE ZOO.

Sir,—The following letter, received in answer to an enquiry of mine, may be of interest to our members, in view of the mention made of *P. apoda* in our last issue. It is from Mr. de Winton, the Acting Superintendent of the Gardens, and is dated March 14th.

> " I regret to say our Bird of Paradise, *P. apoda*, died " about three weeks ago. It had just completed its moult, " and was in remarkably fine plumage. Up to twenty- " four hours before death it was in high spirits and ate " enormously, and was a most charming pet.
>
> " It had unlimited fruit and biscuits, and I fed it myself " the day before it died, on bananas, grapes, biscuits, and " mealworms. Imagine my surprise, on taking it up when " dead, to find that it was terribly thin: this sudden death " and emaciation when in high spirits and feeding " ravenously, is a very common occurrence."

Mr. Clarence Bartlett (the late Superintendent) also informed me that the bird was received in exchange from a dealer in Germany—Mr. Hagenbeck, he believed.

J. A. Swan.



CRANES AT BALLYWALTER PARK.

The Large Birds at Ballywalter Park.

By the Lady DUNLEATH.

I HAVE much pleasure in complying with the request that I should write something about my large birds.

I began with a pair of Demoiselles, and when they died I bought a pair of common European Cranes. They are most interesting birds, which dance and go through the most extraordinary antics. After a year the hen broke her leg, high up the thigh, and died. The cock then made great friends with my hen Flamingo, escorted her about everywhere, and danced to her. They have a range of about twenty acres—wood, grass, and shrubbery—but they all return to their house in the evening, and are easily driven into their different compartments.

Last year I got two more Cranes, quite young: one so young that it refused to eat except out of my hand, and I feared it would die. I fed it on soaked bread—but I believe it was by giving it about four ounces of raw meat cut up, every morning, that I saved its life. The old cock at once took up with these young ones. I have cut some feathers in their wings, so that they can just clear the ground when they try to fly. They are very tame, and the young cock is most amusing: if we wave our arms up and down, he comes quite close to us, drawing himself up to his full height, and does exactly the same with his wings. They always come up to the winter garden, where we have tea, and the other day they walked in at the door and ate cake out of our hands. The old one is not so tame, and, though he comes near, will not let us touch him: he has most lovely plumes. The others have not yet got their adult plumage, and are brown, with a sprinkling of grey feathers.

The old Crane forsook the Flamingo as soon as the new ones came.

I have now got a splendid cock Flamingo and also a pair of fine Rheas. These birds are all friendly together, and have their liberty, but go into separate places at night.

The Flamingos spend most of their time in a pond or stream.

I find the Cranes are very fond of digging up plants as soon as planted, and they follow the gardeners about and undo all they have just done. But if the beds are wired round for a few weeks after planting, they take no further notice of them when the wire is removed.

It is very pretty at tea time to see the Rheas, Cranes, and Peafowl all assembled on the lawn waiting for tea: they seem to know the exact hour.

None of these birds have any heat in their houses and are out all the winter, being only shut in at night. I have seen the Flamingo standing for hours in the pond, when there was a coating of ice on the water.

I am sorry to say that since writing the above the delicate Crane has died — it had been looking rather dull, but died quite suddenly.

The Spotted Flycatcher.*

By J. Lewis Bonhote.

The Spotted Flycatcher *(Muscicapa grisola*, Linn.) is a bird with which all readers of our Magazine must be familiar, as it sits on a post or some railings, darting down every few seconds at a fly, and returning again to the same perch.

In this country it is a Summer migrant, arriving about the end of April and leaving again in August. The nest, built chiefly of moss and cobwebs and lined with horsehair and feathers, is placed in any convenient situation, often in ivy growing up a tree; sometimes in old barns, dovecots, or on the projecting end of a beam: whence the country name, 'Beam Bird,' is derived.

Three years ago a pair took up their abode in a box placed over one of the pigeon holes in my loft. The nest took eight days to complete. During the first three days they collected a quantity of rough material, such as moss, cobwebs, pieces of bark, etc. On the two following days, these were somewhat moulded into shape, and by the sixth day, the lining was begun; this consisted or bits of dried grass and feathers. The nest was completed on the eighth day; during the following day the hen sat on the nest, and the first egg was laid on the tenth. After this an egg followed regularly every morning till the full complement of five had been laid.

The eggs are of a pale blue colour, thickly blotched with rust red; in some specimens the markings are very indistinct, or even entirely absent.

It is noticeable that during the building and incubation, the birds were always to be seen sitting on some railings a few yards distant ; while during the five days the eggs were being laid, they were never to be seen.

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* Reprinted from the *Avicultural Magazine*, Vol. I. (now out of print), by permission of the Author.

In captivity, Flycatchers should be fed on ants' eggs and hard-boiled eggs mixed in equal parts, and as many mealworms as their keeper can afford to give them. They become very tame, and will rise in the air and catch mealworms as they are thrown to them. In catching a mealworm, they leave the perch and hover in the air, waiting for the mealworm to drop, and catch it as it passes them ; if they should miss it, they follow it closely and catch it as soon as it reaches the ground.

The reason they are so seldom seen in the cage, is probably the difficulty with which they are "meated off" when first captured.

The best plan for meating them off, is to get two or three together in a moderate sized cage, giving them some water and food (as described above) in some open receptable, such as the lid of a cocoa tin. On the food place some dozen or so of mealworms, which have been killed to prevent their escape, and throw some alive on the floor of the cage. The cage should be placed in a quiet place, and left for some time. Look at them in the evening, and unless there is a a visible decrease in the food, it will be best to cram them with two or three very small pieces of white of hard-boiled egg, a mealworm and a drop of water. Give them their breakfast in a similiar way, and watch them carefully. If they begin to look 'thick,' that is with their feathers puffed out, give them a meal regulary every two hours. Should no improvement show itself by the following morning, and they have begun at the same time to lose flesh, it is best to let them go, as they will never live in a state in confinement. If, on the other hand, they remain close-feathered, they will probably be well on their food in a few days, though it is best to watch them carefully for at least a week.

This plan would apply to all birds whose diet is an insectivorous one; but most of these submit themselves to captivity with better grace.

I make no mention here of handrearing, as it is a far more trying job, and is, as a rule, far less satisfactory in its results.

There are three species of Flycatchers found in the British Isles: the Spotted Flycatcher *(Muscicapa grisola)*; the Pied Flycatcher (*M. atricapilla*), a small black and white bird; and the Red-Breasted Flycatcher (*M. parva*). The last two species are, however, scarce, and not likely be met with by aviculturists.

The Story of Bird-Death.

By W. Geo. Creswell, M.D., F.Z.S., etc.

(Continued from page 63).

In common with other branches of knowledge that of Pathology has made the most marvellous strides during the last thirty years. To open a textbook current in the days of my studentship, such as that of Professor Aitken, and to compare it with those of to-day, gives one much to reflect upon. At that time a ¼ inch objective was considered sufficient to give all the information that was necessary or indeed available, and nothing at all was really known of the existence of the great army of micro-organisms which pervade the universe, and which are now recognised as the prime causes of so many ills that all flesh is subject to. To-day however, thanks to the patient work of a multitude of investigators armed with superior appliances, so much has come to light that it may be with safety accepted that even the man in the street knows a good deal more of the truth in certain directions than did even the physician of less than half a century past. To take one example for instance—the recondite rubbish taught at that time about "scrofula" and "consumption" and their heredity resolves itself to-day into the tubercle bacillus with its own special life history, and its capacity for attaching itself to individuals even irrespectively of their grandmothers.

Hence it comes about that by the light of latter-day knowledge and methods it may be laid down as an axiom that in eight out of every ten cases no one, whether he be a trained medical or veterinary practitioner, or even a highly untrained layman, can do much more than guess at the cause of a bird's death unless he calls to his aid a modern microscope with its many accessories, and is furthermore able to read correctly the story it unfolds.

One of the commonest ultimate causes of the deaths of such birds as experience the roses and thorns of what we may call civilization—alias captivity—is that ubiquitous microbe the septic bacillus. The spores of this active and indeed useful organism, (for it plays the chief part in ridding us of all animal and vegetable bodies that are finished and done with as integral factors in the world's economy), are everywhere present, existing even in the air in countless myriads. It can therefore be easily understood with what facility a bird's system may be invaded by this humble yet powerful agent; although it must be equally remembered that only in a minority of the instances of invasion does it cause the death of its host. This latter statement must not be taken as a contradiction of the former one ascribing a large proportion of the deaths to this micro-organism. It is by no means such, because even those birds that at last die of Septicœmia in some form or other have often in the past played the host to its bacillus, but have for the time being been immune from its effects through various agencies which will afterwards be alluded to.

When however, owing either to the extra virulence of the organism itself induced by its own previous and individual environment during its development, or else to the diminished power of resistance exhibited by the host in consequence of the temporary incapacity of its phagocytes (the police force of the internal republic), the bacillus, after obtaining an entrance, proceeds to do the bird to death, it may effect this in a variety of ways; or rather it may leave its traces—as apparent to the naked eye—on a variety of organs.

Thus a bird may die of "pneumonia" (without the pneumococcus), of "tuberculosis" (quite innocent of the tubercle bacillus), of "enteritis" ("caused by rape seed"), and of numerous other diseases, as for example "spleenic apoplexy," the existence of all which is equally with their supposed causes purely a matter of ingenious guess-work. Even "diphtheria" and "apoplexy" are sometimes shewn by the microscope to be manifestations of septicæmia, and not to be due, as they would be if the names were deserved, to the Klebs-Lœffler bacillus in the one case and some disarrangement of cardiac force combined with diseased and weakened blood vessels in the other. It must be of course fully admitted that extravasations do occur at times without the aid of the septic bacillus and in the ordinary way, but at the same time in many cases of Septic Fever there are to be found more or less diffused hœmorrhagic stains in the brain and skull that are certainly not so caused, and which are due either directly or indirectly to the action of the toxin or blood-poison originated by the microbe and acting on the blood itself either before death or probably immediately after it.

Of all diseases however with which Septicœmia is confounded, Tuberculosis is the most frequent, and this too in spite of the fact that if even the latter exists at all in birds outside the Gallinaceæ, *which is doubtful*, it is is exceedingly rare. My colleague in the Avicultural Society, Mr. Gill, says in a private letter, for quoting from which I hope he will forgive me, that "tuberculosis is really not common in birds as is usually supposed," although, as he says in another part of the same letter, there are "cases of caseous deposit in the lungs which without microscopic examination one would consider tuberculous." My friend Dr. Clarke, who for many years has worked exclusively at pathology and bacteriology, tells me he has never yet met with a case of avian tuberculosis in any species whatever either wild or domesticated. I myself after preparing and examining hundreds of microscopical slides am bound to say the same thing, although it is true that some months ago I did for a short time think I had at last found a case. Subsequent and careful investigations have however led me to abandon that opinion with conviction, and I am therefore still in quest of what those who rely on the naked eye alone would have us believe is so common.*

These caseous nodules spoken of by Mr. Gill as sometimes found in the lungs are of very common occurrence in the liver and spleen in certain types of septicæmia, and more especially in those very virulent and infectious ones which constitute fatal epidemics, and which may with propriety be dignified with a special name—Septic Fever. But even in these cases and even without the aid of the microscope a short review of the attendant circumstances should shew us how wide is the gulf that separates Septic Fever from Tuberculosis both clinically and pathologically. When I have fully dealt with these two diseases—and I intend to review at length all the available Continental and British evidence and speculations on avian tuberculosis—my readers, professional and lay alike, will see the justice of my remarks.

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* I would ask the members of the Foreign Bird Club to help me in this quest by sending me any bird of theirs that may die of lingering and wasting disease, whether Fowl, Pigeon, or Cage-bird, as apart from any interest attaching to inoculated Tuberculosis there would be a special importance connected with spontaneous cases.

Before I begin the consideration of Septicæmia, which I hope to do next month, a short account of the most recent instance out of those I know of this disease being mistaken for Tuberculosis may be of interest as shewing the mischief that may happen through these errors of judgement. In the first place let me briefly point out that even if avian tuberculosis does exist it must of necessity bear at least some remote likeness to the same disease as it attacks humans. That is to say its mode of incidence upon the community, and its rate of progress should among other things carry some points of resemblance apart from any similarity of pathological manifestations. Although tuberculosis is an infectious disease and is carried from one individual to another by means of its special bacillus, yet it is never found to exist in violently epidemic forms except in countries where it has been newly introduced. Its great characteristic is that it is both endemic and sporadic, i.e. in plain language it is always with us in a more or less steady average, and attacks isolated individnals rather than whole communities. As regards its rate of progress—well, every old village dame knows as well as I do that its course, as to rapidity, is in all save rare instances more like the manners of England in the fifteenth century than those of America in the twentieth.

Now to the story. A certain fancier of Canaries, having in course of long time and by means of much money got together a team of about eighty high class birds, *suddenly* found them to be dying off at the rate of four or five every day. He thereupon immediately sent one of the defunct to a gentleman enjoying some reputation, who after making an examination pronounced the cause of death to be "tuberculosis." The unfortunate owner then appealed to another "specialist," who visited him, examined such of the birds as were then alive, and said the disease was "diphtheria"! This gentleman also prescribed a remedy, (which by the way is of no earthly use even in real cases of diphtheria), and left the premises. As might be expected this antiquated and wonderful nostrum had no effect whatever save doubtless that of worrying the poor sick birds, and so they continued to die. In despair the owner then applied for help to me and in one parcel sent me six birds that had died that same day. His letter which accompanied the bodies informed me that during the ten days or so that had elapsed since the outbreak of the disease he had lost half his birds, and that they had all died after about two days illness. On careful examination I found, what might not unreasonably have been expected from the account of the illness coupled with the well nourished condition of the bodies, that the disease was certainly not Tuberculosis. Neither was it Diphtheria, though for this mistake there was certainly more excuse, since there were in the throats of most of the birds some yellow deposits which to an uneducated and naked eye might have conveyed a wrong impression.

During the next few days he sent me further supplies of dead birds, and all of them I found to have died of the same disease as the earlier ones—Septic Fever, in other words acute epizootic Septicæmia. One of the later bodies,—by this time he had only about a dozen left out of the original eighty—was brought to me by his son, a very intelligent and well educated youth, and I was able during the couple of hours he stayed with me to shew him the distinction between the pathological aspects, both structural and bacteriological, of tuberculosis and septicæmia by means of preparations made there and then from the bird he had brought down, and of others just previously obtained from human sources. [Those of my medical readers who are conversant with bacteriology will not need to be reminded of the striking differences of behaviour exhibited by the two bacilli in question when stained by the Ziehl-Neelson method, nor of their marked contrast as to morphological characters.]

Now if the question were one of only academic interest it would not matter much to the general public by what name the fatal disease was called ; but when it is remembered that the object of post mortem examinations is to get practical help, and when it is realized how much good can be done by *early* recognition of Septicæmia and a consequent speedy isolation of the birds not yet affected, combined with *efficient* disinfection of cages and prompt discontinuance of such food as specially favours the septic bacillus, then the matter assumes an importance of wide spread application that will at once be manifest.

Some months ago I had hoped to have put this question of so called tuberculosis on a more accurate and satisfactory footing through the medium of private correspondence, but I am sorry to say my efforts did not meet with complete success, as not in every instance was my politely worded letter of enquiry as to grounds of diagnosis even answered.

I fear I have by this time greatly trespassed on the space at my disposal in "Bird Notes," but before I close I should like to draw attention, by way of contrast to the above story, to the case of the Linnet in last month's report. Here was a bird which, although fed for a considerable time on tuberculous matter, yet lived in perfect health: when at last it met with a violent death it was found to be free from any disease either tuberculous or otherwise, as apparent to both the naked eye and the microscope. So much for the susceptibility of birds to tuberculosis, the disease which we are told is so highly contagious, or as I would prefer to say—infectious. Another point of interest is that nearly a year before it was killed it was fed for a couple of months on that terrible poison, inga seed, and was yet found to be free of any disease whatever. I may here say that I was not surprised at this; I have made and am still making many observations in this direction, as a result of which I do not share the opinion of those who condemn the use of this seed. Of this more anon.

(To be continued.)

The Past, Present, and Future, of the National British Bird & Mule Club.

By the late PEREGRINE BALL.

THE present Club was founded in 1896, and at its formation included a large number of those who had previously composed "The British Bird Club," which had been brought into existence a few years before by such enthusiastic fanciers as the late Dr. Bradburn, Mr. Charles Houlton, and others then well known. Some of these are still with us, others have gone over to the majority, and I am sorry to say that some have severed their connection with the Club for various reasons best known to themselves.

There is no doubt that the original Club would have continued to exist and flourish had the members been loyal to it. It suffered from a common disease of Clubs—want of energy on the part of the members.

I am afraid that the complaint has been handed down to the present Club.

We want more energy on the part of the rank and file. It is impossible for a Committee, sitting once a month in London, to keep up the required enthusiasm. But all honour to the faithful few who put in such good attendance at the Committee Meetings.

What is required, in my opinion, is re-organization on more comprehensive lines, in order to create that interest among the general body of members which is at present lacking.

Out of the 116 members, I dare say it will have occurred to very few, what an easy matter it would be to double our present membership. Suppose every member prevailed upon a friend to allow himself (or herself) to be nominated for membership, it will be seen that the result would be to double our present strength. It is not asking very much of each member to do this.

I hope in the near future to see the Club in that proud position which it ought to hold.

I am satisfied the material will not be wanting, if only what was suggested in the Magazine for January last is carried out, viz., to form branches with District Committees, whose chief duties would be working up the membership: for it is well known that there are a great many British bird and mule fanciers outside the pale of our Club, throughout the country, who, with a little inducement, would join hands with us, and assist in making the Club a gigantic success.

If such branches were formed, meetings of the members could be arranged at some of the principal Shows at which the Club patronage is granted, for the discussion of matters of interest to the members, and at the same time the members would become personally acquainted with each other.

As I have said often before, it is too much to expect that members should turn up in large numbers to the only meeting held once a year during the Palace Show. When such meeting is held there is scarcely time to complete the business, and it so happens that if anything is left over for an adjourned meeting, it is sure to be the most important item on the agenda, namely, the alteration of Rules. This matter has for the last two years been left over for the adjourned meeting, which means the Committee, almost exclusively.

I maintain that it is not fair to ask that body to carry out such important business unaided, and I think they would be wise in refusing the duty under such circumstances. I, with several others, maintain that every member of the Club should have an opportunity of voting for, or against, any addition to or alteration of Rules. I look upon this matter as of far more importance than voting for either the Committee or the Judges.

The branches advocated should be formed, say, one in the North, one in the East, one in the West, one for London and the Southern district, and one each for Scotland and Wales, with a General Committee to sit in London as at present. Two representatives from each branch or district to act with the General Committee, such representatives to be elected by the members residing in each district by voting papers as arranged by the General Committee.

The proportion of Judges to be elected should be, say, three per district, but not necessarily confined to members residing in such district. Thus, if six districts were formed, there would be eighteen Judges to be elected, irrespective of sections as at present arranged.

My reasons for advocating the nomination of both Judges and members for the various Committees are as follows:—

It would concentrate the votes on the most suitable persons for the duties, and at the same time would act as a guide to those who, although members, are not acquainted with the most desirable persons to fill the various positions.

To some extent also the nomination of such persons would be a guide to the members in voting: for the name of the nominator would often be a guarantee of the fitness of the person nominated.

And, in closing, let me earnestly appeal to every member to use his or her influence on behalf of the Club. I am certain that we have the material ready. It is more will and energy we require all round. Committees can do wonders if only backed up by those who elect them. Members! let us be up and doing, and work with a will in the interests of the Club we own.*

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* This article, the last from the pen of the late Mr. Ball, was written some months ago—but I have hitherto refrained from publishing it owing to the pessimistic views of the Club therein expressed. But members will see on another page that Mr. Ball was right.—W. A. L.

The Chinese Painted Quail.

(Excalfactoria chinensis).

By RANDOLPH QUIN.

THIS little bird, which is about the size of a fortnight-old chicken, makes an interesting addition to the aviary, and, as it is strictly a ground bird, its presence does not add to the crowd of birds above the floor level.

The female is a plain little speckled-brown thing, but the male has the breast and sides blue, and the under parts claret-colour—also some striking bands of black and white across the throat and extending to the ear-coverts.

This bird endures well on canary and millet seed with the addition of a little soft food and a few insects. It is semi-nocturnal in its habits, and decidedly pugnacious—in fact two cocks will often fight to the death immediately they are introduced.

The species has been successfully bred by several aviculturists — notably by Mr. Seth-Smith, who reared quite a large number one season. The young are wonderfully precocious—and are stated to be apparently adult at five weeks old. They should be fed at first on fresh ants' eggs, and it is doubtful whether they could be reared without them.

British Bird Notes.

Mr. Sandy's Nuthatch, after being caged $5\frac{1}{2}$ years, recently escaped.

Mr. E. D. Nicholas Meyer writes me as follows:—"It may interest you to know that on arriving home at Bexhill I found four out of my five Greenfinch hens were sitting on clutches of five eggs each, and the fifth building. The cocks are Siskin, Goldfinch, and Twite. My Linnet-Siskin pair are just beginning to build."

Mr. T. H. Ride sends me a list of migrants which he has seen.

They are much later than usual this year owing, no doubt, to the cold weather:—Chiff-Chaff, March 22nd; Wheatear, April 13th; Swallows and Martins, April 17th; Hedge Warbler, and Yellow Wagtail, April 27th; Whitethroats, Garden Warbler, Cuckoo and Swift, May 25th. He has also seen a pair of Red-backed Shrikes, and noticed that they appeared in the same spot for the last three years; and found nests of Black-headed Buntings, with eggs.

Another member writes:—"It may interest you to know that I have a fine lot of insectivorous birds just now, the best I ever had. They include Wheatears, Whinchats, Tree Pipits, Woodlarks, Shorelarks, Whitethroats, Yellow Wagtails, and last, but not least, a fine cock Blue-headed Wagtail, caught in an eastern county—this is the first adult I have ever had to add to my list. I have six young Bearded Tits (not made in Germany): they are fairly numerous this season in this county, which is accounted for by the open winter."

W. A. LOTT.

POST-MORTEM REPORTS.

(*Vide Rules*).

GOLDFINCH, cock. (Mrs. Belford Wilson). Died of rupture of one of the smaller chambers of the heart, on and around which was lying the escaped clot of blood.

BICHENO-FINCH, cock. (Mr. Fillmer). Apparently ill only one day. Died of pneumonia.

WHITE-CRESTED JAY. (Mr. C. R. Lloyd). In possession of owner about eight months. Seemed quite well up to 23rd May. On being caught up on the 24th it gasped for breath and died in the hand. The immediate cause of death was septic enteritis. In addition to this, the lungs, liver, and spleen were infested with a small nematoid worm, $\frac{1}{1000}$ in. in length, not hitherto described, as far as I can discover. (Vide rules for conditions on which only postal reports are sent).

WAXBILL, cock. (Mr. Fillmer). The immediate cause of death was hæmorrhage into the meninges of the brain corresponding to the external injuries in the frontal region. It is impossible for me to say whether this was the result of assault by other birds or of accident. The bird would not have lived long if even it had not received this injury as it was suffering from enteritis of septic character.

Napoleon Weaver. (Mr. Swan). Too decomposed for examination.

Cockateel Nestlings. (Mr. Salter). These three half-grown birds all died of septic enteritis. Their crops, proventiculi, and gizzards were all full of seed, and they were in good condition as to flesh. The intestines of all three swarmed with septic bacteria. I should advise the discontinuance of the *moistened* bread, and the daily removal from the aviary floor of all excrement, with scrupulous cleanliness as to water vessels.

Silver-Bill, hen. (The Hon. Lilla de Yarburgh-Bateson.) The cause of death was shock due to the rupture of an egg in the oviduct.

Canary, nestling. (Mr. Tweed). This bird, which died on the eighth day of its life, had sweated three days. The cause of death was septic enteritis, the contents of the intestines being crowded with septic bacteria, as also was the liver. I have for some time suspected this micro-organism to be the explanation of this affection. Perhaps members will kindly send me any of their young birds that may die of sweating, and so give me an opportunity of continuing my observations.

W. Geo. Creswell.

Correspondence.

HELP FOR BEGINNERS.

Sir,—It would, I think, add to the practical value of "Bird Notes" if members of the F.B.C. would write giving their experiences in bird-keeping. The points on which beginners want advice are the most suitable species to commence with, both of hard and soft bills; which may safely be caged together; dimensions and arrangements of cages; summer and winter food; when to buy; details of outdoor aviary management; how to attain success in breeding; and any other particulars which would have been a help to themselves in the early stages of bird-keeping.

There are, of course, text books to be had on all these subjects, but a correspondence and discussion amongst ourselves would be of great interest and educational value.

If you approve of my suggestion I hope you will give notice that space will be found in our magazine in future for this object. BIRD LOVER.

[We need scarcely say that we shall be pleased to insert letters carrying out our correspondent's suggestion.—ED.]

BULLFINCHES.

SIR,—I am writing to say I have had just the same experience as your correspondent, Mr. Cunningham, *re* Bullfinches.

One finch I had for three years: he was always in good health until about two months before his death, when he suddenly began to cough and gasp. I tried everything I could think of, but nothing relieved him. The other was a young bird, and he developed the same symptoms soon after I bought him.

I should very much like to know what was the cause of this. I may add they were not kept in the same room.

A. B. CRADDOCK.

SIR,—If Mr. Cunningham will mix a little flowers of sulphur with the seed for his Bullfinches, which are suffering from gapes or asthma, it may give them relief.

I feed my Bullfinches on canary seed with a little German rape and a few sunflower seeds—also some teazle. I give, as they come in season, the following wild seeds,—Grass seeds, dandelion, sour dock, other dock, also mountain ash berries, privet berries, hawthorn berries, brook alder berries, and ash tree seed. These are the seeds and fruits which I have seen Bullfinches feeding on in their wild state.

THOS. H. RIDE.

ALBINOS ABOUT HATFIELD.

SIR,—Thinking it may interest our members, I have written a few notes concerning some albinos and rare-coloured birds I have seen about here. To commence with, I may mention a White Chaffinch. This was a very beautiful male bird which frequented a brickfield near here throughout last winter, and was the talk of the neighbourhood—it appeared fairly tame. I had good opportunities of seeing it and thought what an attraction it would have been to some of our Shows. However, it has disappeared for ever, for after several attempts had been made to capture the bird alive, the common pest, "the lunatic with the gun," appeared on the scene—with the usual result.

Then there was a Cinnamon Hedge Sparrow. This I first saw at a farm near here last autumn, it was exceedingly tame for a wild bird and would allow passers-by to get close to it before flying off. It frequented the vicinity until the end of February last, when it disappeared. I have not heard of its capture or death, so hope that it has by this time been successful in producing some young ones of a similar colour. It was a very light-coloured bird.

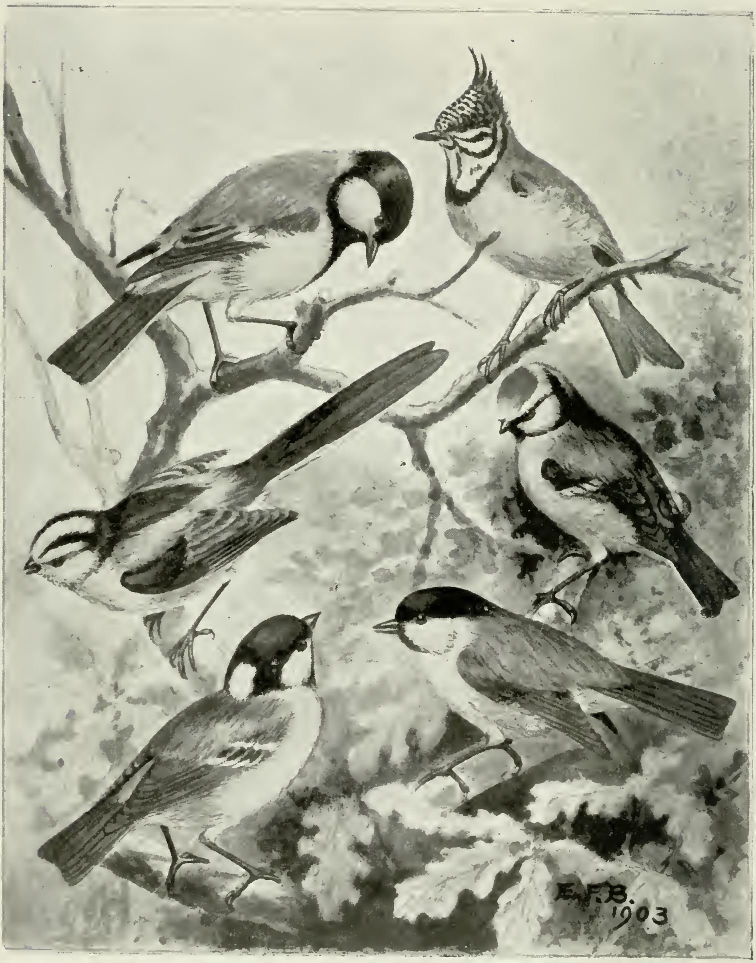
White and Cinnamon Sparrows are frequently heard of, so it is only right that we should have a specimen here—at any rate there is a cream-coloured bird haunting one of the cottage gardens about the Hatfield Estate.

I have also come across a pied Crow, showing a large proportion of white about the flights and body, and a Thrush with a pure white head, but have not had a very close view of either, as they are somewhat wild.

Last, but not the least, a fine Cinnamon Robin, which spent the winter and early spring about the garden of a keeper's lodge, where it became very tame, and was in the habit of flying in and out of the lodge at will for food. The keeper, his wife, and family treated the bird with every kindness, which it apparently appreciated, as its continued visits proved. I must confess to trying to induce the keeper to catch it for me, but the pains and penalties which he told me his wife had vowed to mete out to anyone who should take their pet away, showed me it was no use trying to get the bird. Doubtless it has now commenced housekeeping. I sincerely hope the result may be that next winter my friend the keeper will have several Cinnamon Robins to take up their abode, or get on visiting terms, with him. Possibly, then, a much-coveted specimen might not be missed.

I might also say that all kinds of birds are plentiful about here, especially insectivorous ones.

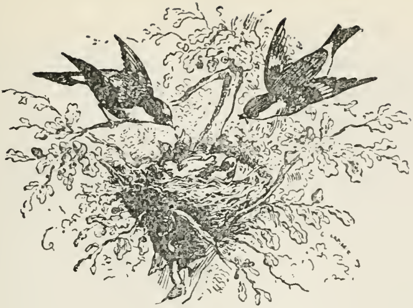
F. TURNBER.



GREAT TIT.	CRESTED TIT.
LONG-TAILED TIT.	BLUE TIT.
COLE TIT.	MARSH TIT.

From a drawing by Mr. E. F. BAILEY, presented by him to the N. B. B. & M. C., and reproduced at the expense of Mr. TROWER.

To face page 105.



Titmice.

By H. J. Fulljames.

I have always derived great pleasure, when I have acquired one representative of any individual species of birds, in making my collection complete as regards that particular family. In foreign birds this object is in many cases unattainable, but the task is not a difficult one in connection with British birds, and I have invariably found reward in witnessing the increased interest of my friends in examining a complete representation of any particular group, over that with which they would have regarded isolated specimens. Among the families which I have been able to complete is that of the Tits, and I have been asked by our worthy Editor to write a few words to accompany the illustration published in this current number of the magazine.

Perhaps no birds have been so mistakenly regarded as the enemies of the farmer and fruit-grower than those which are the subject of this article, and it was at one time the practice in more than one parish to pay head-money for "Tom-tits," which included of course all species of Titmice. The birds representing this species are nearly entirely insectivorous, and only eat seeds and berries when live food is unobtainable because of the season. It has been observed that one single pair of Blue Tits have conveyed to their young in the course of one day not less than a thousand grubs and insects, and there can be no doubt that the insects devoured by any one bird, in a season, would have done infinitely more harm, if left alive, than the bird itself would effect if it lived half the year on seeds and fruit. It is undoubtedly the fact that Titmice destroy apparently sound fruit buds, but it is equally certain that the birds can see more than the grower, and that each of the buds so attacked is, at the time, the home of a grub. However, as this is not an article on agriculture, I will proceed with my subject.

Counting the Bearded Tit, which is really the representative of a separate family, the *Panuridæ*, there are seven different Titmice, all of which are illustrated in our clever drawings by Mr. E. F. Bailey.*

The Blue Tit (*Parus cæruleus*) is found generally throughout Great Britain and Ireland, but gets scarce towards the North of Scotland. It is also very widely distributed, as in fact are all the Tits, throughout the continent of Europe, where it is partly migratory from north to south according to season. Continental representatives of the various species of Tits differ somewhat in appearance from their British relatives, and these variations make in themselves an interesting study, although not coming within the scope of this present paper.

Essentially a wood-loving bird, the Blue Tit by no means keeps away from human habitations; indeed, even in the suburbs of London, this sprightly little feathered friend is a fairly common object in our gardens. In food it is almost entirely insectivorous, but in winter, when live food is scarce, it will subsist upon such grain and seeds as it can find. A farm or poultry yard is sure to have Blue Tits, and a bone hung to a piece of string will soon have its little colony of these beautiful birds industriously pecking at the morsels of meat left on it. In plumage it is quite the most beautiful of the family, the colors ranging through different shades of blue, to green, yellow, and white, while the head is conspicuously ornamented by a narrow band of blue-black, separating the white of the cheeks from the azure blue of the neck and the pale yellow of the throat. In the male a distinct black band runs from the beak through each eye, and is the principal distinguishing mark of sex, this line being much less distinctly defined in the hen. The colors of the hen, also, are less brilliant than those of her mate. The nesting place is usually a hole in a tree or wall, but the most extraordinary places are sometimes chosen by the Blue Tit—pumps, even when in daily use, post boxes, tin cans, bottles, and almost every kind of receptacle occasionally being occupied for the purpose, and I have somewhere read of a Blue Tit's nest having been built in the jaws of a skeleton of a man hung in chains. They are fairly easy to keep in captivity if provided with a good insectivorous mixture, such as I shall mention later, but they require very close watching when first caught or they will die in a few hours. It was once my experience to send, in answer to an advertisement in a "fancy" paper, for two pairs each of Blue Tits, Marsh Tits, and Cole Tits. I duly received two cigar boxes, each divided by partitions into three spaces, and the six compartments each contained two *dead birds*. I have often suspected that some at least of the unfortunate prisoners must have been dead when packed by the advertiser. Afterwards I have always caught my Tits for myself or bought them *after* inspection. They are very easily caught in an ordinary trap cage baited with a live mealworm; in fact I remember on one occasion, when I had one of these cages set for another purpose, catching the same Tit, in this case a Great Tit, so many times, that at last I had to keep him in a spare cage for an hour or so in order to keep the trap-cage open at all.

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* The drawing of the Bearded Tit will appear in our next issue.—Ed.

(To be continued).

The Pagoda or Black-headed Mynah.

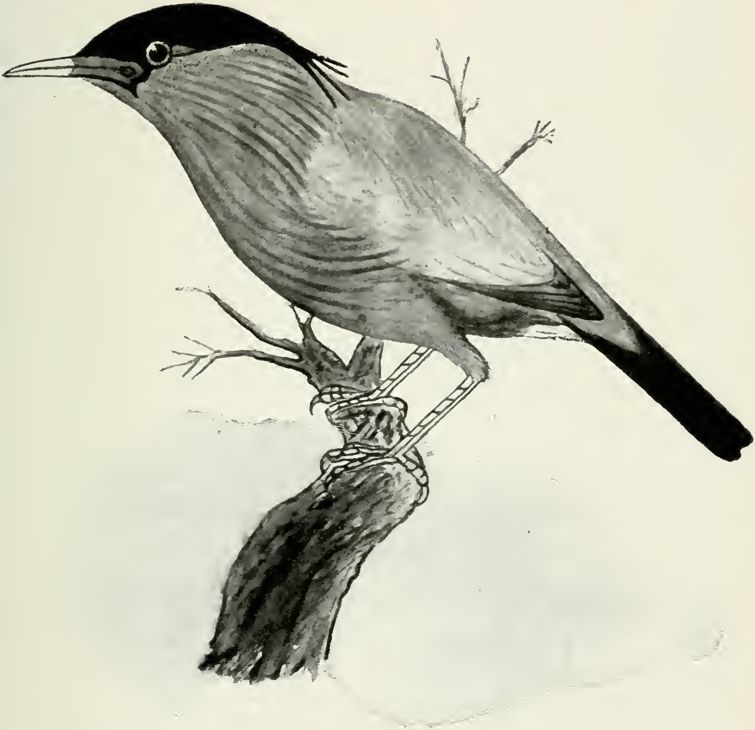
(Temenuchus pagodarum).

By Allen Silver.

The Pagoda Starling, or Brahminy Mynah as this bird is otherwise called, is certainly not one of the commonest of our foreign cage birds, and I intend, with the permission of the Editor, to briefly discuss the species. Having some time ago purchased one, and not being quite sure of its identity, I wrote to Dr. Butler on the subject and with his help was able to find out more about this "natty" Mynah, which certainly deserves to be better known as a cage bird.

It is not a bird of brilliant plumage, but the colours are delicate and the contrast is exceedingly pleasing, and if in health it is a model of neatness and cleanliness.

The song may be described as a mixture of the good and the bad, and is as surprising as it is comical. Whilst singing, the bird puffs out its ragged plumage and raises the crest, at the same time lifting the head slightly. A few harsh calls are heard, immediately followed by several mellow whistling notes that would put in the shade the average Blackbird, then the broken song of a young Thrush is gone through, terminated by inward "chuckles." And having had more time than usual on my hands lately, I notice that into his song my bird introduces a whistle which



THE PAGODA MYNAH.

(Temenuchus pagodarum).

From a drawing by Mr. ALLEN SILVER.

To face page 108.

I am wont to use whilst talking to him, and seems to try new notes of his own every day. The ordinary call note consists of a quiet "cherrukk," and when alarmed it calls out not unlike a Jay, of course not in such a loud tone.

In size the bird is similar to the Redwing Thrush, and, having an example before me, I will roughly describe the colouration: Bill at the gape and base cobalt blue, at the nostrils greenish, remainder yellow. The parts usually described as the legs and toes yellow, claws strong and whitish. Eye sharp and piercing, the iris being silvery white, and a bare space is situated immediately behind the eye, being more visible at one time than another. Top of the head surmounted with a glossy black crest, which reaches well down the back of the neck. Sides of face, ear coverts, throat, breast, flanks, and under parts reddish buff showing distinct lines of shade. Back, shoulders, and saddle down to the tail, a delicate dove grey. Wings a similar colour, except the primary feathers which are black. Tail feathers whitish, the upper ones being black and these entirely cover the light feathers when retracted, so that unless the bird spreads its tail these white feathers are not seen. A white feather is sometimes seen at the shoulder according to the manner in which it arranges its feathers. When closely examined it tightens its crest close to the head and neck in a beautiful curve, and the feathers of the back and body are drawn closely together, which gives the bird a tapering appearance. If undisturbed the feathers are carried very much more loosely, when they appear pointed and shaggy and hang lappet-like, reminding one of the plumage of a Heron. If quite at ease the bird often looks very shaggy, and the chin feathers stand out quite straight from the skin and give the bird a most peculiar appearance.

Quiet and gentle in its movements, it is not a blustering cage bird, but is rather inclined to crouch than "bang about." In the aviary it flies lightly, and runs and walks gracefully on the ground. Fond of bathing, it keeps its plumage spotless, and is a pleasure to the eye. Being hardy I find it is no trouble to cater for, and it will winter outside with ease in an aviary, and can be caged in a cold room, where undoubtedly many species would be better than in a varying temperature.

I give a varied menu, and find that on this the bird shows no tendency to fatten although caged. Soaked dog biscuit squeezed and minced with hard-boiled egg, is the staple. Occasionally I substitute potato for this, and add, now and then, a little meat. Sometimes, perhaps, finely sifted barley meal is used instead of biscuit, and a few soaked ants' eggs, also dried plums and currants, of which it is extremely fond. Gritty sand is always supplied, and the bird requires to be kept clean, and will take readily any live food offered, such as flies, spiders, cockroaches and earwigs; but it shows a special partiality for beetles and crickets. Its cage ought to be as big as a proper Thrush's cage, and in such it becomes tame and familiar. There is no need whatever to give meat and egg more often than once or twice a week, and a little cracked hemp is suitable.

Of this bird in its wild state certain writers give slightly differing opinions. In Madras it builds in large houses, pagodas, etc., but Hume says it prefers holes in trees. Mr. Blewitt found the nest in mango, tamarind, and jamin trees from May until July. Feathers, grass, and odd pieces of material are sometimes used, and the eggs are not quite an inch in length and bluish or pale greenish blue. It can be found on the Himalayas up to a certain range, in various parts of India and Ceylon, and in Lower

Bengal, also the Cashmere districts, and was found breeding in holes in trees in Ceylon from July to August. It is also seen flocking on open bushy plains, bare fields and low scrub country, feeds on the ground, and is difficult to approach. Some hold that it associates with cattle, others say it does not. Seeds, buds, and small fruits are eaten, and grasshoppers and beetles are its favourite food. It sings whilst on the wing as well as when perched, and flies strongly and straight and swiftly, in closely packed flocks. It has been known to feed on the seeds of the budding pine in Cashmere. For further particulars the reader would do well to look it up in Legge's "Birds of Ceylon," where the species has a detailed chapter.

The Story of Bird-Death.

By W. Geo. Creswell, M.D., F.Z.S., etc.

(Continued from page 96).

FROM the foregoing it will be plainly apparent how unsafe it is to conclude that tuberculosis is present in birds or indeed in any animal simply on the evidence of white spots or nodules being found in or on any organ of the body. True it is that tuberculosis in one stage of its progress causes the existence of a white spot; equally true is it that a mare is a horse: but while nobody in the possession of ordinary common sense would assert that a horse is always a mare, it would seem that many people find no difficulty whatever in maintaining the parallel fallacy that every white spot they see is a tubercle in the limited sense of its being produced by tuberculosis. Some people indeed will occasionally go further than this, and in the most confident and light-hearted manner will even diagnose tuberculosis in animals they have never seen and belonging to a species well known to all bacteriologists as particularly insusceptible to the disease. Of course it is needless to say that these same authorities are quite sure that tuberculosis is hereditary, forgetting (if indeed some of them ever knew the fact) that what is caused by the adventitious agency of a microbe—a foreign invader—during post-natal life can scarcely have been present at the time of the formulation of the original germ-plasm, often many years previously. Leaving this disease for the present however in the hands of our friends, we will now proceed to the discussion of Septicæmia; but for the better understanding of the subject we will first take a fleeting and cursory glance at some of the various forms of parasitic life in a general way, doing so in the simplest manner possible in the consideration of so intricate a subject.

Parasites admit of — indeed they demand — the most varied classification. Firstly they may themselves be either animal or vegetable: secondly both forms may attack either animals or vegetables. With those that attack only the latter we have no concern, and will therefore confine ourselves to the consideration of those that prey upon either living animal tissues, or dead animal and vegetable matter, or both.

Some attack only the outside of the body, others the internal parts: some attach themselves to many kinds of animal, others to only a few species: some are parasitic during the whole cycle of their existence, others during only a portion of it.

The chief animal parasites that infest birds are certain species of wingless insects (lice), of arachnida (mites), and entozoa (worms), all of which possess analogues to be found on and in the human body, but which unlike them have as yet received only very scant attention at the hands of scientific observers. It is true that a few of them have been identified and relegated to their proper position in the animal classification, but their life history has yet to be properly worked out. Perhaps now that it is beginning to be recognised that birds as well as other animals should participate in the benefits conferred by science, it may reasonably be hoped that some of our competent workers may throw themselves into this domain of original research, where I can assure them they will find plenty to reward them for their trouble.

Turning now to the vegetable parasites we find (1) that they belong to the *Thallophytes*, i.e. they are plants in which the leaf and stem are all in one, and (2) that possessing no chlorophyll (or green colouring-matter) they fall into the class of *Fungi*. These fungi again resolve themselves into three sub-classes—Yeasts, Moulds, and Bacteria. In the present state of our knowledge the first of these three are unimportant to our subject, while the second are to be looked for in their several forms as the probable causes of some of those symptoms connected with the skin and its appendages that are at present accounted for according to the cognoscenti by that wonderful and mysterious disease called "surfeit," the pathology of which I regret to say has not yet been advanced by those who, being responsible for the name, are of course quite able to explain all about it. In connection with this second group of parasites there is again an opportunity for research offering itself to enthusiasts in comparative pathology at the expense of very little trouble compared with that involved in the pursuit of the organisms comprised in our third section—Bacteria. These, with which alone we are now concerned, are technically known as *Schizomycetes* or Fission-Fungi, and are so named from their characteristic method of propagation, which is by fission or division at right angles to their length. Occasionally however they multiply by spore-formation, but the conditions under which this happens are not very clear, and at best we can hardly be said to have yet emerged from the region of speculation as to the reasons for this departure from their normal habits. Sometimes fission and spore-bearing can be seen to be in operation at the same time. Multiplication by fission is a rapid process and as it takes place in consonance with the laws of progression there are, as will be seen, some startling results. It varies as to rate in different species. In some it takes as long as half an hour, and in some as short a time as ten minutes. The daughter cells formed by this division proceed immediately to grow and to divide again in like manner, with the effect that a single bacterium may thus easily multiply itself into sixteen millions in the short space of twenty four hours!

Bacteria are in their turn subject to different methods of classification and from different points of view. For instance there are some that live only on dead matter—animal or vegetable—and are hence known as "saprophytic"; others that find their means of existence in living tissues and, while doing so, set up a condition of disease. These are therefore termed "pathogenic" or disease producing, and sometimes "parasites" in a limited meaning. Then there are those which in a general way are saprophytic, but which under favouring conditions are able to become parasites or pathogenic. These are then known as "facultative parasites." A bacterium that *requires* oxygen to maintain its life is called an "aërobe"; one that prefers no oxygen receives the name of "anaërobe"; and those which *cannot* live in oxygen are said to be "obligate anaërobes." With this explanation to guide them my readers can easily divine the meanings of yet two more cross-divisions, viz. "facultative aërobes" and "facultative anaërobes."

When a bacterium is round in shape it is known as a "coccus," and if very small as a "micrococcus": cocci occurring in pairs receive the name of "diplococci": those cocci that are found to arrange themselves one after another like a chain are called "streptococci," and those that form groups after the manner of a bunch of grapes are distinguished as "staphylococci."

The term "bacillus" is applied to a bacterium that is rod-shaped, as opposed to the spherical coccus. These vary a good deal both in size and shape; they may be short and thick like the septic bacillus or long and thin like the one responsible for (the real) tuberculosis. They may have round ends or square ends; they may stain throughout or only at the ends; in short the differences are endless not only between species but even in a less degree between individuals of the same species.

In addition to cocci and bacilli there are many other shapes in which bacteria are found, but the above enumeration will be enough for our purpose, and I fear to weary my readers with too many technicalities.

Among other wonders connected with these marvellous organisms their minuteness is not the least. They are so small as to necessitate the use of a specially adopted term of measurement—the micron, representing $\frac{1}{25000}$ of an inch and designated by the sign μ. Many microbes measure but $.5\mu$ and there are but few that reach 2.5μ.

(To be continued.)

Budgerigars.

By E. Hopkinson, D.S.O., M.B.

For the last ten years these birds have been breeding more or less freely in my aviary at Brighton, and as since 1894 I have kept a fairly complete record of their numbers and progeny, I have drawn up a genealogical tree, and a pedigree of one of the youngest birds, hoping that these records will be of some interest to others besides myself. I have not been able to trace the descent of all the birds enumerated on Table 1, for now that there are generally a dozen or more in the aviary I can only be certain about those birds which have been marked by leg-rings. For this purpose I use ordinary "eyes" (hook-and-eye), and find them much more satisfactory than the strips of aluminium I used at first, which were easily pecked off by the birds unless fixed so tightly as to be likely to cause injury. I use both black and white rings, and find that with these two colours, the two legs, and the two sexes, I get a sufficient number of different combinations to mark satisfactorily up to 10 or 12 birds. The great advantage of these "eyes" is the ease with which they can be fixed, and their safety—they can be nipped on quite loosely without slipping off, while so far, at any rate, I have never seen any injury attributable to their use.

The Budgerigars share an outdoor aviary (16 feet by 6 feet) with other British and foreign seedeaters, but these parrakeets take no notice of their fellows—seeming to live a life apart, untroubled by, and rarely troubling, other birds, and going to nest regularly, undisturbed by the crowds around them. Of late there has been indeed a crowd, 200 odd a year ago, and now, when they are nesting more freely than they have ever done before, there are well over a hundred other birds with them, varying in size from a Zebra

Waxbill to a Cardinal and a Senegal Dove. I must say "rarely" not "never troubling their fellows," as occasionally I have found a bird scalped or otherwise injured, and have felt sure that a Budgerigar was the offender; but then I know that the victim has been caught inside one of the husk-nests by its rightful owner, who naturally has resented the intrusion in the only way it could. In the open, and even at the food, I have never seen any attempt to injure a smaller bird, though they undoubtedly can do a great deal of damage if they are provoked; but considering the number of birds, and the chances they must have of pecking a weaker neighbour, the casualties due to the Budgerigars are but few: I had a Bishop once who did more damage in a week than all the Budgerigars have done in ten years.

As the Tables show, the birds are now a good deal in-bred and all directly descended from the original pair, as of all the new additions only three (15, 40, 41) have bred and thus introduced some fresh blood. In spite of this I do not think that the stamina or the looks of the birds have in any way degenerated, but, on the other hand, I think the younger ones are rather bigger and better than the earlier ones, and certainly they compare favourably with those I see elsewhere. With one exception, all the aviary-bred birds have been in every way healthy, with no signs of feather-weakness or "French moult." This exception was a case of this disease, which developed in one of our birds which had been given away. The trouble began when the bird was eight months old, and the unfortunate bird lived for eighteen months or more, a palpitating lump of pink with about three feathers on its head; at least that is how it looked to me, but its owner assured me it was "such a dear" and "so intelligent," and would not hear of its "happy despatch."

The Tables are, I hope, self-explanatory; I need only add that Table I. is a complete list of all the Budgerigars I have had, except for the small number which may have escaped entry if they were born during one of my absences from England.

In Table II. (the Tree) I have inserted the relationship of the different pairs, in order to make clearer the very complicated state of the present stud. In the pedigree of No. 75 I have given each bird a fancy name, as I found that if figures alone were used the lines of ancestry were not nearly so obvious.

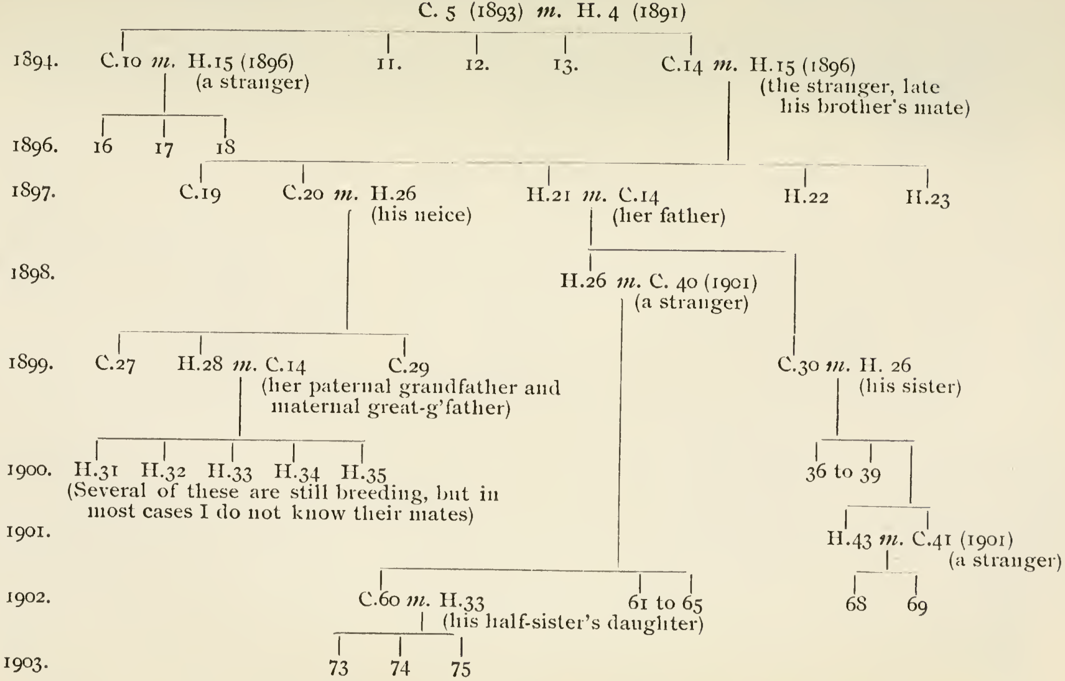
TABLE I.

NO.	SEX.						
1	C.	Bought	1889	Kept in cage; the hen went to nest		Died	1891
2	H.	,,		in a husk, but died before hatching		,,	1890
3	C.	,,	1891			,,	9/1893
4	H.	,,	,,		4	,,	12/1897
5	C.	,,	10/93		5	,,	8/1895
6	?	,,	10/93	6-9 were all wretched birds which	6	,,	2/1894
7	?	,,	,,	developed French moult and soon	7	,,	4/1895
8	?	,,	,,	died	8	,,	9/1894
9	H.	,,	,,		9	,,	4/1895
10	C.	Bred in aviary	5/1894	By C.5 ex H.4	10	Sold	10/1895
11	C.	,,	,,	,,	11	,,	,,
12	C.	,,	,,	,,	12	Died	9/1896
13	C.	,,	7/1894	,,	13	,,	8/1897
14	C.	.,	,,	,, (by a cat)	14	Killed	6/1901
15	H.	Bought	1/1896		15	Died	7/1899
16	H.	Bred in aviary	5/1896	By C.10 ex H.15	16	,,	5/1897
17	C.	,,	,,	,,	17	,,	8/1896
18	C.	,,	,,	,,	18	,,	2/1898

19	C.	,,	6/1897	By C.14 ex H.15	19	,,	1/1898
20	C.	,,	,,	,,	20	,,	1/1899
21	H.	,,	,,	,,	21	,,	1900
22	H.	,,	8/1897	,,	22	,,	6/1898
23	H.	,,	,,	,,	23	,,	1/1900
24	C.	Bought	4/1898	Real imported birds with very blue legs	24	,,	12/1899
25	C.	,,	,,		25	,,	10/1898
26	H.	Born in aviary	10/1898	By C.14 ex H.21	26	,,	2/1903
27	C.	,,	7/1899	By C.20 ex H.26	27	,,	12/1899
28	H.	,,	8/1899	,,	28	,,	2/1903
29	C.	,,	,,	,,	29	,,	11/1899
30	C.	,,	,,	,,	30	,,	1902
31	H.	,,	1900	? Parentage	31	Given away	7/1901
32	H.	,,	,,	,,	32	Alive	6/1903
33	H.	,,	,,	,,	33	,,	,,
34	H.	,,	,,	,,	34	,,	,,
35	H.	,,	1900	,,	35	Given away	7/1901
36	H.	,,	1901	,,	36	Died	1902
37	C.	,,	,,	,,	37	Sold	8/1902
38	H.	,,	,,	,,	38	Given away	5/1903
39	C.	,,	6/1901	By C.30 ex H.26	39	Died	1902
40	C.	Bought	7/1901	"Aviary-bred"	40	Alive	5/1903
41	C.	,,	,,	,,	41	Given away	1/1903
42	C.	,,	8/1901	? Imported There were so many more Hens than Cocks in the aviary at this time that I had to import more of the latter to keep the peace.	42	Died	1902
43	H.	Born in aviary	1901	? Parentage	43	Alive	5/1903
44	C.	,,	,,	,,	44	,,	,,
45	C.	,,	,,	,,	45	Escaped	8/1902

46	C.	Born in aviary	1901	? Parentage	46	Given away	5/1903
47—59		,,	1902	With at least a dozen others, never entered. The Budgerigar-population of the aviary had increased so much that, on my return to England in July, 1902, I found that there were 36 to dispose of, and these I got rid of as soon as possible, reducing the stock to 3 or 4 pairs	47 to 59	Sold or Given away	1903
60	C.	,,	7/1902	By C.40 ex H.26	60	Alive	5/1903
61	C.	,,	,,	,,	61	Given away	2/1903
62	?	,,	,,	,,	62	Sold	9/1902
63	?	,,	8/1902	? Parentage	63	Given away	9/1902
64	?	,,	,,	,,	64	,,	11/1902
65	H.	,,	,,	,,	65	,,	5/1903
66	C.	,,	,,	By C.41 ex H.32	66	,,	1/1903
67	H.	,,	,,	,,	67	,,	,,
68	C.	,,	9/1902	? Parentage	68	,,	2/1903
69	?	,,	,,	,,	69	,,	1/1903
70	?	,,	10/1902	,,	70	,,	11/1902
71	H.	,,	,,	,,	71	,,	2/1903
72	H.	,,	,,	,,	72	,,	2/1903
73	C.	,,	12/1902	By C.60 ex H.33	73	,,	5/1903
74	?	,,	3/1903	,,	74	,,	4/1903
75	?	,,	,,	,,	75	Alive	5/1903
76	?	,,	4/1903	? Parentage	76	,,	,,
77	?	,,	,,	,,	77	,,	,,
78	?	,,	5/1903	,,	78	,,	,,

TABLE II. GENEALOGICAL TREE. 1894 TO 1903.


C. 5 (1893) *m.* H. 4 (1891)
1894.
C.10 *m.* H.15 (1896)
(a stranger)
11.
12.
13.
C.14 *m.* H.15 (1896)
(the stranger, late his brother's mate)
1896.
16
17
18
1897.
C.19
C.20 *m.* H.26
(his neice)
H.21 *m.* C.14
(her father)
H.22
H.23
1898.
H.26 *m.* C. 40 (1901)
(a stranger)
1899.
C.27
H.28 *m.* C.14
(her paternal grandfather and maternal great-g'father)
C.29
C.30 *m.* H. 26
(his sister)
1900.
H.31
H.32
H.33
H.34
H.35
(Several of these are still breeding, but in most cases I do not know their mates)
36 to 39
1901.
H.43 *m.* C.41 (1901)
(a stranger)
1902.
C.60 *m.* H.33
(his half-sister's daughter)
61 to 65
68
69
1903.
73
74
75

NOTES.—C. = Cock. H. = Hen. *m.* = mated with. The date after certain of the numbers, is that of the purchase of new birds.

TABLE III. PEDIGREE OF No. 73, BORN 1903.

	Strange Lady, 1896	Annabel, 1897	26 Bella 1897	28 Betty, 1900	33 Mary, 1900	73 (1903)
Eve, 1891	Abel, 1894					
Adam, 1893						
	Eve, 1891	Abel, 1894				
	Adam, 1893					
		Strange Lady, 1896	20 Prince 1897			
	Eve, 1891	Abel, 1894				
	Adam, 1893					
			4 Eve, 1891	14 Abel, 1894		
			5 Adam 1893			
		15 Strange Lady, 1896	21 Annabel 1897	26 Bella, 1898	60 William, 1902	
	Eve, 1891	Abel, 1894				
	Adam, 1893					
		Eve, 1891	Abel, 1894			
		Adam, 1893				
				40 Stranger, 1901		

The Redrump as a Cage-Bird.

By W. GEO. CRESWELL, M.D., F.Z.S., etc.

THE member of the group of Australian Grass Parrakeets known as the Redrump (*Psephotus hæmatonotus*) is familiar enough to all of us in the advertisement columns at so many shillings a pair, and to many of us as an inhabitant of the aviary, where in consequence of his pugnacity he generally has to be content with his wife's companionship only, and where he is more or less undistinguished except for the ease with which he can be persuaded to reproduce his kind. There are two sides to every bird's character according to whether he is viewed in relation to other birds or to humans: the popular fetish of buying and keeping foreign birds only in pairs whether they are breeders or not—save and except the larger talking Parrots and occasionally one or two other varieties—is responsible for the latter view being almost lost sight of: and to a great extent this is to be deplored, since many birds only exhibit their full measure of idiosyncrasies and intelligence when brought under the influence of human companionship and civilization.

The bird under notice is a striking example of this: in his wild condition he is shy and gregarious, and more of a crawler on the ground than a denizen of the air and trees; in an aviary—as also when at liberty—he makes no nest whatever, but just allows his hen to make use of any hole that already exists in a tree or log; neither does he assist her in the task of incubating her five or six white eggs; nor in fact does he apparently live for any other purpose than to domineer over his mate and occasionally to give vent to a few whistling sounds, the chief merit of which is that they are not unpleasantly harsh as are the cries of most of the Parrot tribe. As a cage bird kept under favourable conditions he is quite another sort of person and takes high rank as a pleasing and intelligent companion to man even when taken up and caged at the period of puberty. Removed from the nest at about ten or twelve days old and artificially reared, I am convinced that he would be just perfect as a house pet, not only as regards his capacity for affection and confidence, but also by reason of his general cleverness and proficiency in talking. That the Redrump has considerable powers of mimicry will be presently seen.

My own knowledge of him was due to a happy chance. In the early part of the summer of 1902 I made the acquaintance of a fellow aviculturist who lives amidst purely rural surroundings about three miles from my house, and there I found in an aviary at the bottom of his garden a pair of these birds apparently about to breed. Thereupon, as I am told is quite usual among bird lovers under the circumstances of seeing a bird for the first time, a bit of the old Adam came at once to the surface in the shape of a covetous desire, which culminated before I left my friend's premises in my bespeaking one of the young cocks that might possibly be seen in the sweet bye and bye. In due course my purchase took a definite shape; and although it has often been my lot to feel a daily and poignant regret that I had ever seen some bird or other that I had only too eagerly acquired, yet in this instance I have never experienced anything but unalloyed delight at having followed my natural instincts. My original intention was to keep Mr. Billy (as I have since named him) in an aviary after the general fashion and to provide him ultimately with a mate. When however he arrived at my house in the character of a strong and well grown adolescent there was no aviary at liberty for his accommodation, and having heard something about the pugnacious and overbearing habits of the species I dared not introduce him among a lot of small birds engaged in domestic affairs. He therefore had to put up with the limited space afforded by an ordinary Budgerigar cage about 14 inches square. After a preliminary banging about for a few days when anyone came near he gradually steadied down, becoming at last as quiet as a caged Canary. Soon he began to whistle and from the beginning he evinced the mimetic faculty of which I have spoken, and for which I was at that time quite unprepared, sharing as I did the popular belief that only Parrots and some Cockatoos and Macaws were capable of learning to imitate the voices of other races. Having been reared in a country garden he had picked up almost entirely the song of the Thrush and now rendered it in a voice not far behind that of the teacher in quality and timbre. During the continuance of the warm weather his cage was out in the garden all day but after a time when it became colder both he and my Blue-fronted Amazon found permanent quarters in the dining-room, where they had for a companion a particularly accomplished and energetic songster in the person of my favourite Siskin-Canary hybrid. As the days went by Billy became a more and more persistent singer, and in the depth of winter would even treat me to music during my dinner by gaslight, and this although his cage stood on the dining-room table itself. But the most interesting point is that he gradually picked up from the Parrot a number of her sayings and incorporated them with his song, giving the various inflections just as Polly had learnt them from different people in the house. For instance "Pretty Polly," "Oh pretty Polly," "Naughty girl," etc. would each of them be said in two or three different ways, and now and then a couple of bars of "Pop goes the weasel" would be introduced to be followed without any break by the original imitation of the Thrush and his more recent one of the Siskin mule.

That all the mimetic members of the Parrot tribe take a decided, and often a keen, interest in learning to imitate other animals I am quite certain: unless they did so they would never undertake the incessant practice necessary for the very gradual evolution of a melody, perfect in time and tune, from the primary chaos of a few crude and discordant notes. For instance, little Billy would every day—generally in the afternoon—dispose himself comfortably in a corner of his cage on one of the lowest perches, with his feathers ruffled up and his head tucked half under his wing till he looked almost like a green ball; then for perhaps a quarter of an hour he would keep on repeating in almost a whisper some phrase or other that he was learning. Surely this betokened a truly student-like spirit, and one that I am afraid is not usually found among the youth of our schools. In one respect however Parrots are very like mankind—that is to say in intellectual grading, for while one bird will comparatively quickly learn two or three airs quite accurately and whistle them one after another without any mistake, there are many that only with the greatest trouble get so far as to render one tune, and that but very imperfectly.

To return to my little bird:—More remarkable even than his unexpected vocal powers was his capacity for play. One hardly associates a Parrakeet with any idea of a cat, but nevertheless in many of his playful tricks Billy almost out-hoydened the most hoydenish of kittens. After walking head downwards about the roof of his cage he would suddenly drop, turn a somersault, and alight on a perch. Then perhaps for five minutes he would run sideways at a tremendous rate backwards and forwards from end to end of this perch, finally performing an evolution that for a long time much puzzled me, so quickly was it done. After much watching I made out that it consisted in partially turning a somersault forwards through his own feet while they were still on the perch, and in then letting go and finishing in the air, having dropped behind the perch and not as would be expected in front of it. Another feat of his I was never able to satisfactorily follow though it was always done comparatively slowly. First of all his head would be bent down and passed right through his feet, then he would seize the bar with his beak underneath from behind and from that position would in the most curious way get round the perch and come up all right on the other side. Sometimes too, while clinging to the wires at the side of the cage, he would get his head down in front of his body and make a complete revolution without dropping to the ground. In doing this it is obvious that he would have to let go of the wires, but the odd part of it was that you could never detect exactly how or when it it was effected. This trick was occasionally varied by his standing with one foot on the perch and with the other abducted and placed perhaps an inch up the wires and by his then revolving so to speak on his own axis through his feet. A favourite diversion was to lean forward, grasp the perch with his beak, and to slowly "circle the bar" very much after the time-honoured fashion current in our own gymnasia; sometimes this little exercise would be finished up by his hanging from the perch by his beak for a few seconds and then quietly dropping to the floor.

While all these evolutions, evidencing as they did a distinctly healthy mind in a remarkably healthy body, were interesting enough to watch, they were nothing compared with those which he sometimes performed merely as the result of a sudden ebullition of high animal spirits. Then he was boisterous in his play—a very whirlwind of riot and fun—as I have said before, more kittenish than the most kittenish of kittens. One of his favourite bits of mischief was to stand on a perch and vainly try to lift it out of the wires with his beak: realizing at last the futility of this proceeding he would succeed, if the perch was one of the lower ones, in converting his failure into a brilliant success by throwing himself on his back on the floor and pushing the perch up with his feet. Having moved it up perhaps an inch he would then turn over and finish the wicked business by prizing it up with his shoulders. To disengage the other end was then an easy matter, and now the real fun would begin. Running toward the piece of timber as though with the intention of violently assaulting it, he would suddenly stop and run away with every appearance of fright: after perhaps several feints he would eventually seize it, and then a terrible wrestling match would take place, in the course of which the gyrations of the little fellow were almost impossible to follow, while the stick itself from its rapid movements almost appeared to be endowed with sentience and volition.

Such games as this, marked ever with modifications devised on the spur of the moment, but all equally extravagant, were the daily amusement of my little friend and companion so long as he remained a bachelor; but when with a view to a succession of Billies, in the early spring I obtained for him a partner of all his joys and sorrows, he suddenly seemed overwhelmed with a sense of the responsibilities of life and forthwith began to experience the serious side of existence. The joyous song, the school-boy romp, were now no more indulged in to gladden the hearts of his featherless friends and erstwhile companions, though he would still occasionally condescend to take some tit-bit from the mouth just to shew that he had not quite forgotten us.

Somebody or other has somewhere very truly said that of all birds the Parrots most nearly resemble the human race. Mr. and Mrs. Billy have left their cage and now have an aviary to themselves; Billy has no feathers on the back of his head, and is sometimes heard to sing the old songs in a low tone—when his wife is safe in her nest. His eye has if anything a wiser look about it than of yore, and sometimes he "gets a bit of his own back."

Notes by a Hybrid Breeder,

By William C. Cunningham.

IS IT possible for birds to know artificial eggs from real ones? After my experiences with two Greenfinch hens, I would decidedly say "Yes!"

In one case I have a cock Goldfinch mated with a Greenfinch hen, in a cage. When she laid the first egg, of course I took it out of the nest and put in a china one. The same evening I found the dummy egg in the water vessel. The next evening she laid a second egg, and I replaced it with a china one. At night when I got home I again found it in the drinker. This performance was repeated the next day also, so, thinking that the Goldie was perhaps the culprit, I took him out. However, on the fourth morning the hen laid another egg, and I again replaced it with an artificial one. After doing a few odd things in the room, my eye caught Mrs. Greenfinch standing up in the nest, and deliberately taking the china egg in her beak and carrying it to the seed box. It then occurred to me to try the hen with real eggs, so I immediately put four Canary ones in the nest. She seemed to know the difference, for she settled down nicely, and never once interfered with them.

In the other case I had a Greenfinch with a Siskin in a compartment of the aviary. She built a nice nest in a German cage, and laid five eggs. Like the former hen, she evicted the china eggs, but did not touch some real Greenfinch eggs which I gave her.

The above circumstances prove conclusively, I think, that birds *do* know the difference between artificial and real eggs.

The hybrid breeder has really a very trying time of it, and I do not wonder that so many give up the hobby in despair. Some hens may do very well one year, and, the next, make a sad mess of it. As an instance of this, I have a Bully hen, which, mated to a Linnet cock last year, had over a dozen fertile eggs. This year, with the same cock, and in the same aviary, her eggs have been all bad so far, although both birds seem to be in perfect health.

On the whole, my Bully hens have been much later than usual in starting to nest this year. At this date (9th June) I have five hens that have not began operations even yet.

My success up to now has been *nil*, but I am still very hopeful. I have two hens laying to Greenfinch cocks. Both these hens had fertile eggs last season; the one to her present mate, and the other to a Greenfinch, which, much to my regret, escaped from the aviary some time ago.

I am sorry to say that I have had a good many deaths among the finches, both cocks and hens, and have been wondering whether the fact of my giving dandelion heads *ad. lib.* has had any bad effect. I always understood that wild seeds could be given with safety in any quantity; but I am informed by an old fancier that this is an erroneous idea, especially as regards dandelion.

* * *

The National British Bird and Mule Club's Annual Outing.

By J. Robson.

This event took place on Saturday, June 13th. At the last Committee Meeting, the question having arisen as to where we should go, our Hon. Sec., Mr. Lott, informed the meeting that through the kind influence of Mr. Carr, one of our members, the large woodland on Lord Ashcombe's Denbies Estate, Ranmore Common, Surrey, was at our disposal as a rendezvous for the outing. Also that Mr. Carr had very kindly offered to be our escort. Such a kind offer and excellent opportunity was naturally accepted unanimously. All the necessary arrangements were left in the hands of Mr. Lott, and were carried out by him to the full satisfaction of all concerned.

We were notified by post card to meet at Victoria Station at 1.30 p.m. sharp. Notwithstanding the downpour of rain, which commenced some three quarters of an hour before the appointed time, some fifteen members and friends turned up. All the time we were in the train the rain came down in torrents. On arrival at Box Hill Station it was still raining a little, though we were in hopes of its clearing up. After some slight refreshments we set out for our destination, which was some two miles distant up a gradual incline. The scenery was lovely, and a more picturesque spot could not possibly be found. It could not be better named, as box trees, which had grown to a wonderful height, abounded on all hands along the route. Their dark green foliage, and, in many instances, peculiar shapes, with drooping branches, made a sight which can only be realised when seen, and many of our company stood and admired them.

Bird life was rather quiet on account of the heavy rain which was still falling. Still, on our upward journey, some of us espied several nests of the Blackbird and Thrush. We also came in close proximity to a very fine Meadow Pipit. A little later an excellent specimen of the Green Woodpecker came in full view, while the Nightingale gave forth his call as we passed, and responded to the call of one of the party several times—but we were not able to get a view of him owing to the thick foliage of the trees. By this time we had reached our destination, and the rain had all but ceased. Our esteemed Vice-President, Mr. Fulljames, had brought with him his camera, in the hopes of taking some photographs of nesting places and views of the scenery. Photographing over, we sat down to an excellent meat tea, and all did ample justice to the good things provided. After tea we had a look round, and then set out on the return journey. While passing through a densely wooded place, several of the company espied quite a number of little Golden Crested Wrens, chattering and going through all manner of antics at the top of a tall fir tree. We counted quite a dozen as we stood and watched them.

The Blackbirds and Thrushes kept pealing forth their mellow notes as we strode along, making the still country air echo with telling effect. A nicely constructed nest in the top fork of a holly tree, which appeared to be that of a Thrush, caught our eye. It was soddened with the rain which had fallen for days previous to our visit, and doubtless had been deserted on this account. By this time we were at Box Hill. Several of us climbed the hill, which is a great height, and on arriving at the top we found the ground comparatively dry, as if there had been but little rain up there the whole of the day. The rabbits were out taking their evening feed and dashed in numbers into their holes on our appearance. By this time we had to make for the station to catch our train back to the busy Metropolis. But for the weather we should have spent a most glorious day.

* * *

POST-MORTEM REPORTS.

(*Vide Rules*).

RIBBON FINCH, cock. (Rev. R. H. Wilmot). Found dead. There was a localized extravasation on the vertex of the skull, due to a sharp blow. This was the cause of death; the injuries to the toes were not recent.

CANARY, hen. (Mrs. McAdam). This bird was ill when she was bought, and would have been dear at 1/-, let alone 21/-. The cause of death was an old pleurisy on the left side with an effusion of pus, combined with resulting and extensive amyloid degeneration of the liver and spleen. The right lung was quite healthy. The amyloid disease shows long continuance of the original pleurisy. The treatment that had been adopted was quite useless.

AURORA-FINCH, hen. (Dr. Hopkinson). All the organs were quite healthy, but she was not in breeding condition (although she had built a nest and was sitting). Death was due to concussion of the brain, there being a large and sharply defined hœmorrhage on the vertex.

CANARY, hen. (Mr. Tweed). Very meagre particulars as to illness. Lung congestion was the cause of death, combined with disease of the kidney.

CROPPER, cock. (Dr. Mottram). For some time past this pigeon has been ill, sitting about on the floor, with hurried respiration and gradual progressive emaciation. He had diarrhœa, and if held up a foul smelling fluid exuded from the mouth. On examination the liver was found to be studded with innumerable tiny white spots. The spleen also was nodulated in the same way and was enlarged. The contents of intestines, the heart blood, and the spleen were crowded with septic bacteria of all forms, the cause of death being septicæmia. Tubercle bacilli were absent.

CROPPER, hen. (Dr. Mottram). The pericardium (sac containing the heart) was distended to its fullest extent by a blood-clot proceeding from rupture of the left auricle of the heart. All the other organs were quite healthy. I have hitherto seen this condition in a Goldfinch only.

CANARY, young. (Mr. Tweed). This bird had a small hœmorrhage in occipito-vertical region of skull. (Please send in all cases full particulars as specified in *post-mortem* rules).

CANARY, hen. (Miss Barns). This bird was abnormally fat, and the cause of death was apoplexy (cerebral hœmorrhage).

CANARY, young. (Mr. Tweed). "Taken ill after being pecked, and bleeding from tail feathers on June 27th, died same morning." This bird had been ill some days without showing it. The spleen and liver were much enlarged and the intestines were inflamed. The latter contained septic bacilli in considerable numbers, and the liver some cocci. Septic poisoning was therefore the cause of death.

ORANGE-CHEEKED WAXBILL, ZEBRA WAXBILL, CORDON-BLEU, AND AVADAVAT. (Mr. A. Philip). These birds, which died on the 25th inst., were received on the 28th and were too decomposed for examination. Will members kindly conform to my conditions *in every respect?* (Letter sent).

CANARY, young. (Madame Gorter). This bird died of septic enteritis of some standing, and not of a fit. It was in a very bad condition, and may possibly have infected other birds.

CANARY, young. (Mrs. McAdam). This bird had been ill longer than was thought, the vent feathers being very dirty, and the body very emaciated. The intestinal contents were a mass of septic bacilli, and the cause of death septic enteritis. Care must be taken lest it spread among the other birds. (Letter sent).

CANARY, young. (Mr. Tweed). (Very meagre particulars sent). There was a large clot of blood in the brain just behind the left eye, apoplexy being the cause of death.

ZEBRA-FINCH, hen. (Mrs. Ollard). This bird died of septic enteritis, a disease which is infectious.

ZEBRA-FINCH, young. (Mrs. Ollard). The cause of death was the same as in the preceding bird.

CANARY, young. (Mr. Tweed). Very meagre particulars sent. Septic enteritis, involving congestion of liver was the cause of death.

FOWL, hen. (Miss Nicholson). This bird, which was very verminous, died of septicæmia. This is very infectious and has evidently been the cause of death of the other birds. The treatment adopted was useless, and the bird was in a very bad state.

CANARY, young. (Mr. Tweed). This bird had congestion of liver and spleen. Since there was no micro-organism present to account for this, and since all the other organs were healthy, it is probable that the bird was too well fed.

CANARY, hen. (Mr. Tweed). Ill fourteen days, symptoms not given. This bird died of septic enteritis.

LAVENDER FINCH. cock. (Miss Saywell). Concussion of the brain was the cause of death. The appearances pointed to its having been pecked. You are right, the birds do not require covering up.

CALIFORNIAN CRESTED QUAIL. (Mr. T. N. Wilson). This bird, stated to have died on the 9th, was delivered at 8 p.m. on the 10th in such a state of offensiveness that the package could not even be opened in the house.

N.B.—Will correspondents kindly refer to rules before sending birds.

W. GEO. CRESWELL.

Correspondence.

BULLFINCHES.

Sir,—I beg to thank Mr. Ride for his kindness in answering my letter about Bullfinches.

I shall try the sulphur cure at the first opportunity. Of course, the feeding may have something to do with the trouble, and the seeds mentioned by Mr. Ride are no doubt the best to give, but when one is trying to breed hybrids, one must give seeds suitable for both birds. Take Goldfinch-Bullfinch for instance. No Goldfinch will thrive without an abundant supply of hemp—at least that is my experience—and hemp is said to be bad for Bullies.

But, after all, the feeding cannot be the principal reason for the gasping, as some of the affected finches were getting just the seeds named by Mr. Ride, viz. : canary, German rape, teazle, and a little sunflower. Wm. C. Cunningham.

Foreign Bird Queries and Replies.

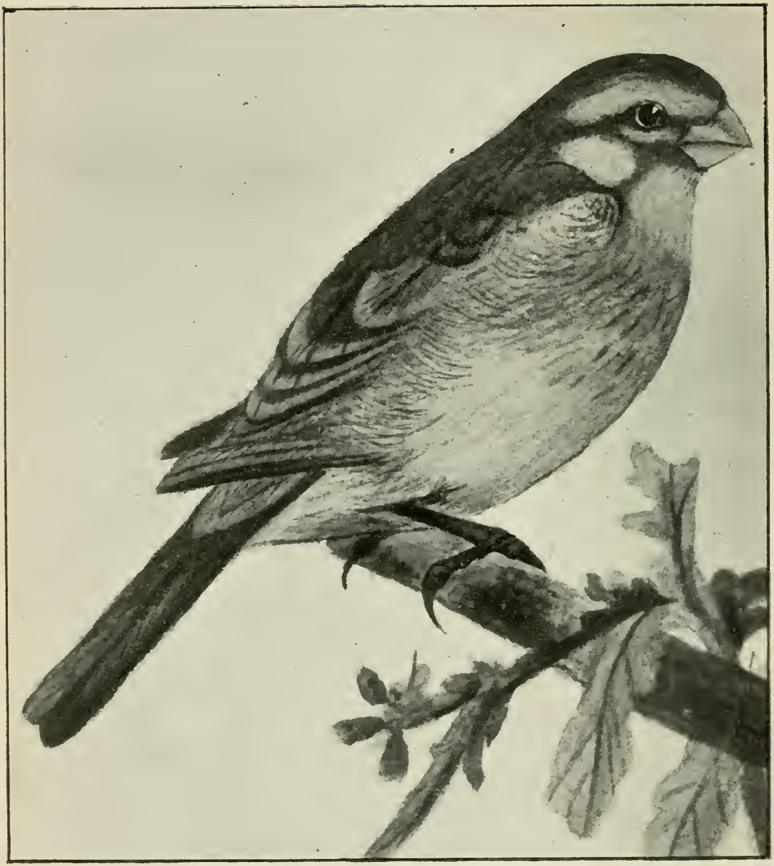
FERTILITY OF HYBRIDS.

Question: Please tell me through "Bird Notes," if a cross between a cock Redrump and hen Rosella would be fertile. I have some very pretty young birds, which are anxious to nest themselves. Would there be any use in getting pure bred mates for them ?

E. B.

Answer: I understand that you have some hybrids between the Redrump and Rosella, and wish to know whether these would breed, either among themselves or with pure bred examples of either species. I should say, decidedly, that it is extremely improbable that they would breed—as hybrids between different species of birds, except in the case of game birds and some others, are practically invariably sterile.

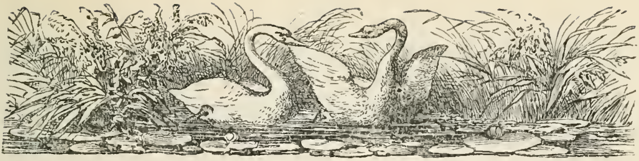
H. R. F.



THE SULPHUR SEED-EATER

(*Serinus sulphuratus.*)

rom a Drawing by Miss ELEANOR BROOKSBANK. To face page 137.



The Sulphur Seed-eater.

(*Serinus sulphuratus*).

By W. Geo. Creswell, M.D., F.Z.S., etc.

OF the nineteen different species of Serin sixteen belong to the Continent of Africa, in the southern portion of which the subject of our sketch is an exceedingly common resident, and where it is known by the trivial name of Zazel. One of my correspondents, who tells me that he saw a great number collected together in a drove, (though he unfortunately omits to mention at what time of year this occurred,) goes on to say that his attention was specially attracted to them on account of their flight, which was particularly laboured and heavy in its character. This is only what one would naturally expect from the appearance of the bird. It is large—probably the largest of the family, heavy in build, somewhat awkward in carriage, and, compared with its congeners, extremely apathetic in manner. Also it has the true serin beak very much accentuated, which considerably adds to its heaviness and what we may call its loutishness. But in spite of all this I cannot quite say it is an ugly bird. From this it is redeemed by a suggestion of power and boldness, both apparent and latent, that much commends it in my own opinion. Still more to be commended is the manner in which it controls this power:—so far from using its formidable beak to nip off the heads of its wee companions in the aviary it will allow such fragile little creatures as Gold-breasted Waxbills to sit huddled up against it on the perch, and will allow itself to be bullied in the most impudent way by those Lilliputian tyrants the Grey and Green Singing Finches.

When we come to its colour it is by no means unpleasing. Green and yellow arranged mainly after the same pattern as in the Yellow-browed Seed-eater and Green Singing Finch, though perhaps a trifle less bright and distinct than in those birds, give it an unmistakable look of cousin-ship to them.

Of its song I cannot judge. The one specimen that I have kept in my bird colony was a female, which paired up with a Linnet, but unfortunately did not lay, though she built a nest in a Hartz cage. By way of contrast with her usual behaviour, her conduct while engaged on the construction of the nest was full of spirit, for although she never attempted to maltreat her companions, she scarcely ever let five minutes go by without a vigorous tug of war with some Canary or Greenfinch over a bent of hay or other nesting material that they had both a mind to.

According to my Colonial acquaintance the nest in the wild state is built in a low bush, and the eggs are like our Linnet's but something larger.

Judging from its commonness in its native home and the ease of communication between that country and this, one would expect to see this bird very frequently in the dealers' shops, but such is not the case.

Like all the Serins and indeed most foreign birds, if it can be brought over here without contracting Septicæmia on the voyage from the usual filthy conditions, it is a very hardy bird and stands our climate quite well in an outdoor aviary all the year round.

Titmice.

By H. J. FULLJAMES.

(Continued from page 108*)*.

SINCE writing the first portion of this article I have, curiously, come across the following confirmation of my recollection of having heard of a case of a Blue Tit building her nest in a skull. I give the extract as it was printed in the magazine in which I found it. The bird is mentioned as a "tom-tit," but all Tits are tom-tits to the man in the street.

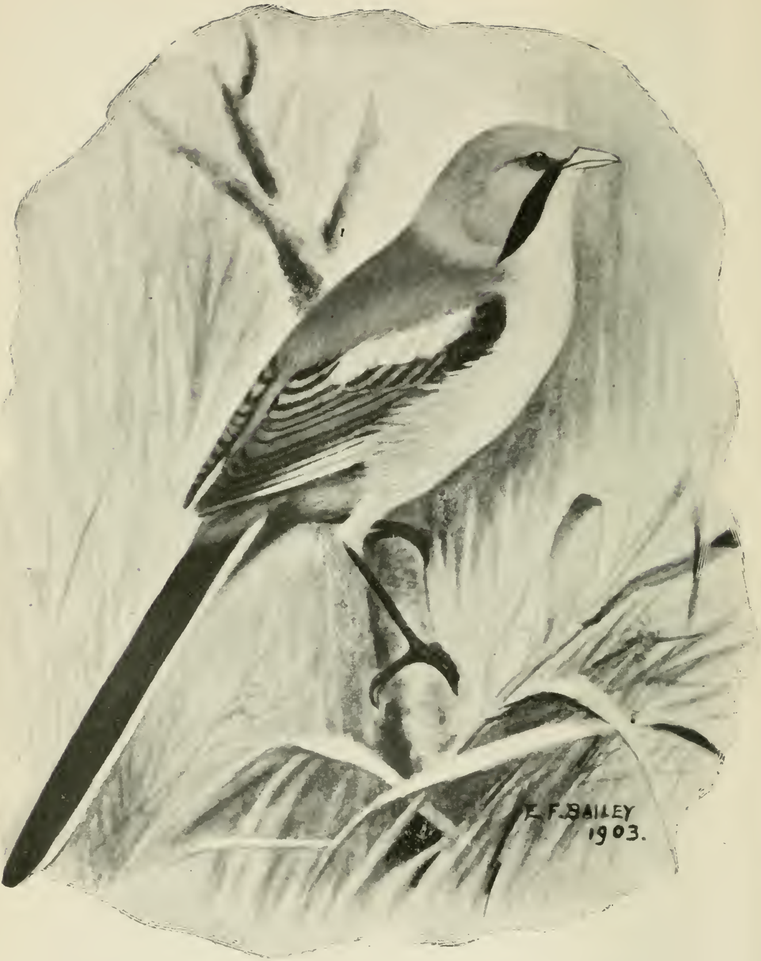
" For two successive years, it was recorded at the " time, a tom-tit nested in the gaping mouth of Tom " Otter, whose body, gibbeted and swinging in chains, " was for a long while a terrifying object at Saxilby, " from 1808 onwards. Otter had been convicted at " Lincoln of murdering his sweetheart, and was " hanged at Lincoln Castle. The spot where his " body swung in chains, still known from that circumstance as 'Gibbet Lane,' was the scene of his " crime. A ghastly rhyming riddle was composed " by some ingenious local person with a taste for the " gruesome, on the subject of the tom-tit's singular " choice, by which it would appear that the tit's " family numbered nine altogether. The rhyme ran " as follows :

" 'Ten tongues in one head,
" 'Nine living and one dead :
" 'I flew forth to fetch some bread
" 'To feed the living in the dead.'

" The answer was, of course, 'The tom-tit that nested " in Tom Otter's head.' Portions of Otter's irons are " still preserved at Doddington Hall, near Lincoln."

The Great Titmouse, or Ox-eyed Tit (*Parus major*) is perhaps better known even than the Blue Tit, but I think it is not nearly so numerous. As its Latin name suggests, it is the largest of the Tits, and its bright colour, and the fact that, although very sprightly, it is not so quick in its movements as the Blue Tit, render it more easily observable and more generally known than its congener. It is not by any means a gregarious bird, and in this respect it differs very considerably from all the other members of the family, all of which, with this exception, seem to rejoice in the companionship of their own species, especially in the autumn and winter. Like all the Tits, the Ox-eye is a strictly resident bird with us, and it is common in most European countries. It is not so wholly insectivorous as the Blue Tit, and in captivity will eat freely of hemp and sunflower seed, which it will hold between its two feet and hammer at with its particularly sharp beak until it reaches the kernel. Nuts of any kind it is also partial to, but these should of course be cracked for it. This bird should never be kept in a cage or aviary in companionship with other birds. Among my experienced avicultural friends I have some who deny that the Great Tit is dangerous to other birds, but I have certainly proved him to be a murderer of the deepest dye, and I would never keep one except in a separate cage. There may be some truth in the theory held by many that the Great Tit only attacks sickly birds which would soon die without his help: but even if this be so, I still prefer to exercise my own option of mercifully killing, or setting at liberty, an ailing bird, rather than leave the matter to the discretion of an Ox-eye Tit.

The Cole Tit (*Parus ater*) is another very generally distributed bird throughout Great Britain and Ireland. In Scotland it is, I believe, more frequent than either the Blue Tit or the Great Tit. It is a most charming little bird, but lacks the bright colouring of the two first-mentioned. In size it is even less than the Blue Tit, and there is little chance



THE BEARDED TIT.

From a drawing by Mr. E. F. BAILEY, presented by him to the N. B. B. & M. C., and reproduced at the expense of Mr. ARTHUR JONES, of Hackney.

To face page 141.

of keeping it imprisoned in either cage or aviary if there be a single weak place in the wiring. It is, like the Blue Tit, incessantly active, and the aviary needs to be exceedingly well-wired to hold it. This species is not so generally seen about our houses as the two above-mentioned, living mostly in woods, especially the pine woods of Scotland. Like the Blue Tits, these birds are distinctly gregarious in habit, and in favoured localities they are to be seen in quite considerable troops, seeming to move about from tree to tree with one accord as if in instantaneous obedience to the command of a leader. The nest is mostly found in holes in banks or walls, or, less frequently, in holes in trees. In captivity it should be fed on insect food; but it will eat the kernels of hemp and sunflower seed after the manner of the Great Tit, and these should always be offered, if only for the occupation afforded to the bird in the breaking of the shell.

The Marsh Tit (*Parus palustris*) is perhaps a little less common than the Cole Tit. Not much could be said of this bird which would not apply to the subject of the previous paragraph. It is equally tiny, equally acrobatic, equally gregarious, and lives in exactly the same style, both as regards its food and its nesting places. It is said of the Marsh Tit, however, that pairs once mated remain so for life. The colouring is sober, and the plumage is principally remarkable for the distinct black cap, from which the bird has derived the occasional name of Blackcap Tit, or, sometimes, simply Blackcap. The Marsh Tit is frequently confounded with the Cole Tit, but this should not be so, as, although neither can boast of any brightness of colouring, the difference in plumage is very considerable.

The Long-tailed Tit (*Acredula rosea*) is the most difficult of all the Tits to keep in health in captivity.

In food it is strictly insectivorous, and in confinement it really requires to be fed nearly entirely on live insects, so that the proper feeding of a Long-tailed Tit in captivity entails such trouble as to be almost a matter of impossibility. The stock food which I have always used for these birds, and with which I have achieved a fair amount of success, is a mixture of the very best ants' eggs (steamed over boiling water), dried flies, yolk of egg, and chopped cream cheese. The latter may appear a curious item of food for insectivorous birds, but I have on numberless occasions proved its great value in this and similar connections, and I believe I am one of the very few who have ever successfully "cage-moulted" Long-tailed Tits. They soon become very tame, and make delightful pets, this being naturally brought about by the necessity mentioned of giving them live insects from the fingers, as, no matter what food may be supplied to them in the hoppers, they will soon die unless supplied with live spiders, houseflies, and other insects.

It may be useful to point out to would-be exhibitors of the Long-tailed Tit in British Classes, that the bird they are most likely to be offered by dealers is the continental form, *Acredula caudata*, and that if they show this latter bird under a competent judge of British birds they will meet with certain disqualification. The continental bird has a nearly entirely white head, and is brighter generally in plumage than its British relative, although in the matter of white markings even our British birds differ with the seasons, the white being considerably purer in the summer than at other times of the year.

The Long-tailed Tit is fairly frequent throughout Great Britain and Ireland, but is not so partial as most of the other Tits to the neighbourhood of houses, keeping mostly to the woods and coppices. Its nest is a wonderful structure of moss, wool, lichens, etc., the inside being lined luxuriously with feathers, and the outside imitating so closely the bark of the tree in which it is built as to be exceedingly difficult of discovery. Cocoons which have contained spiders' eggs, and chrysalides of various moths, are very largely used by these tiny birds in the construction of their wonderful nests; and immense numbers, two thousand at least, have been counted as forming part of one of these structures. The bird is locally known as the "Bottle Tit" and "Featherpoke"—the first from the shape of its nest, and the latter from the feather lining of the same; indeed none of the British Tits have so many popular names as this. It is called variously Long-tailed Titmouse, Bottle Tit, Pokefeather, Poke-pudding, Huck-muck, Long-tailed Mag, Long-tailed Mufflin, Long Tom, Bottle Tom, Long Pod, Long-tailed Pie, Mum Ruffin, etc.

(To be continued).

Vagaries of Popular Pathology.

By R. H. Clarke, M.A., M.B. Camb., M.R.C.S.

WHENEVER I have taken up a book or paper on birds I have been accustomed to turn with interest to anything relating to their diseases. The subject is fascinating to those interested in pathology, not only for its own special problems but also for its relation to subjects of wide interest and general importance. *Post mortem* examination of large animals is beset with many difficulties, the work is arduous and often repulsive, and the inevitable surroundings so disagreeable that the advantage of having pathological problems bound in the tiny and portable volume of a cage bird is incalculable, and they assuredly deserve better treatment than they have received. So far as English publications are concerned, my interest has been exhausted by repeated disappointment. I have searched carefully for information and too often have found only stereotyped error, reckless assertion, and inveterate ignorance.

This state of things has always appeared to me quite unaccountable. Why this extraordinary neglect of a subject which offers so many attractions and advantages? I have never been able to find an answer, but some time ago I heard an explanation which I dismissed as wholly ridiculous; it would not be shaken off, and has recurred from time to time with such curious corroboration that I am tempted to seek for further light upon it. My informant was one of those gentlemen who are always "in the know," who can tell you everything everyone wants to know about everybody, and he was perfectly familiar with all the secrets of the press. According to him nearly all the "reliable" racing tips which are published every day, emanate from one person, the great Major Profit, who is often correct, and, but for some very remarkable accidents would always be so: and the information on bird diseases is nearly all supplied by a medical man in large practice who on occasions of great pressure relegates this and other duties to the surgery boy, "Well," I replied, "if that is so I must have been singularly unfortunate, or the doctor's urgent calls very frequent, for I am thoroughly familiar with the views of the surgery boy, but I cannot remember having met with those of the doctor." (Of course my remarks do not apply to Dr. Creswell's reports in "Bird Notes.") No doubt others will regard this explanation, as I did, as a mild joke; but they may be startled, as I was, to find how the theory fits some of the facts they will encounter. Take any of the reports of post mortems of birds which appear in the fanciers' journals. Here are a few recent ones from a copy of "Cage Birds":

1. "Your bird died of cancer of the spleen, "was also tuberculous (consumptive) in lungs, liver, "and bowels." This is curious; "the boy" has always mistaken septic fever for tuberculosis, but I have not noticed cancer before in the same connexion. Septic fever is the most characteristic and one of the commonest of the complaints which attack cage birds. An acute disease, often epidemic, lasting as a rule from a few days to a fortnight, and characterised by tubercles or caseous nodules in the spleen, liver, lungs, intestines, and tongue. Even the man in the street, if he can recognise these simple signs, may be satisfied the bird has died of this disease. It has never been proved that cage birds suffer from tuberculosis, or that they are capable of infection with human tuberculosis in any way. It is true that they suffer from a disease attended by the presence of bacilli which resemble tubercle bacilli in some but not all respects, but whether this is what is called avian tuberculosis, and whether avian tuberculosis is the same disease as human tuberculosis, are questions which have yet to be decided. But one thing at any rate is certain, that, whatever this disease proves to be, whether it is a form of tuberculosis or not, it has neither the course nor the symptoms of septic fever, and there is no excuse for confounding them.

2. "Your bird died of rupture of big blood "vessel consequent on contagious tuberculosis or "'bird fever' or 'Canary plague,' sometimes called "'splenic apoplexy.'" Heavens, what an assortment! It is as if one had called in an expert to give the name to a particular flower, and he had reported that it was a rose, or a carnation, or a daisy, sometimes called a buttercup. Splenic fever is the common name for anthrax, which is just as distinct from tuberculosis

as a rose from a daisy. Bird fever and bird plague are synonyms for septic fever. But what on earth is contagious tuberculosis? Tuberculosis is infectious. The bacilli are conveyed in the expectoration, when this dries they are carried by the air to the mucous membrane of susceptible individuals, where they grow and set up disease. But "contagious" implies that a disease is conveyed by direct contact, a diseased surface is brought into direct contact with a healthy one and infects it. How often do we see general and fatal tuberculosis conveyed like this? And if birds do suffer from it how can they convey it in that way?

But the most remarkable case is that of "the "eye-marked hen. This is a very interesting and "unusual case." (Indeed we must hope so!) "It has "been stated on good authority that Canaries are "liable to contract every disease that affects humanity. "But be this as it may, we feel convinced your bird "had small pox (!) or some equally malignant skin "disease" (what can that be?); "the odour, the "sloughing away of the skin, the yellow pustules, "all indicate small pox." "Angels and ministers of grace, defend us!" Surely it is high time that the vaccination act was extended to cage birds; to think, with all our precautions, that we have overlooked such a hotbed of infection in our midst! and then to think of our pet Canary as "a conscientious objector" —it would be worse than small pox; but perhaps this rôle will be reserved for the London Sparrow, who seems well suited to it.

But these medical mares' nests are not confined to the journals. Here is a sentence I came across the other day in the preface to a popular work on birds: "I have not found it necessary to rewrite my intro- "duction, nor to insert a chapter on the diseases of "birds. Whilst I always recommend remedies to be "used, and frequently use them myself, I am con-

"vinced that when a bird has made up its mind to "die it is perfectly able to do so, even though every "organ be healthy. When depressed and out of "health a bird has no desire to live, and remedies "most frequently only prolong its existence for a few "days." How does a bird "make up its mind to die"? Before it can make up its mind it must obviously have some idea of what death is. Now whatever differences of opinion there may be about an inductive faculty in animals, I never heard a competent observer maintain that the most intelligent animal (let alone a bird, with its rudimentary brain) was capable of abstract ideas. To say it is perfectly able to die even though every organ be healthy, is sheer nonsense. No creature dies without an adequate cause, and the will is not one of these. The most determined man in the world cannot hold his breath for three minutes, much less kill himself by an effort of will. That an animal or a man may die without any *apparent* disease of his organs is of course true, death from chloroform vapour is an instance: but because the lesion is obscure, not evident to the naked eye, it is no less real. Chloroform paralyses the respiratory centre in the medulla oblongata—the most important organ in the body, and a medulla poisoned with chloroform is no more a healthy organ than a liver poisoned with phosphorus. Then, if all the organs are healthy, why recommend remedies? Do they act on the mind, and if so how? Or is the remedy so nasty that the bird thinks death may be purchased too dearly, or so nice that it thinks after all there is still something to live for?

(To be continued).

My Experience with Young Cuckoos.

By J. P. Carr.

I have, from time to time, heard of people trying to rear young Cuckoos. I believe some have succeeded, and others, like myself, have given up the job in disgust. I will here give an account of my experience with two young Cuckoos.

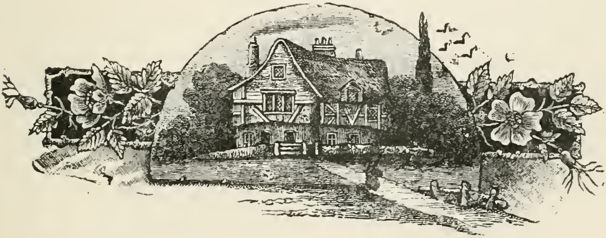
A few years ago, on a beautiful day in July, I was out for a stroll. My object was to see a pair of Greater Spotted Woodpeckers feeding their young in a certain tree in a wood. I took up my stand by the trunk of a large tree, situated on the sloping bank of a meadow bordering a wood, which place gave me a good view of the Woodpeckers' hole. I had not taken up my stand more than five minutes when my attention was drawn by the call note of a pair of Meadow Pipits. On looking round I saw one of the

Meadow Pipits with food in its bill: so I passed round to the other side of the tree and watched to see where it took the food. I had not long to wait before the bird dropped in the grass about twenty yards away. I marked the spot and at once made for it, and to my surprise I found the nest to contain a young Cuckoo about a fortnight old. It was such a fine fellow I could not resist putting it in my handkerchief and taking it home, where I placed it in an old Blackbirds' nest, in a box. I made up a mixture of crushed biscuits and ants' eggs, but could not get it to feed that day. It hissed at me every time I attempted to give it food. Next morning I had to cram it, but before midday it began to gape and take the food all right.

After a few days I put it in a large cage. It became very tame, always sitting on my hand while being fed. This went on until it was about a month old, when I got tired of feeding it, so I put it in a cage along with a Thrush that had fed and reared two young Thrushes that season: the Thrush began to feed it almost at once. It was very lazy, seldom moving off its perch, and when it did it moved about very clumsily: all it thought about was feeding. After the Thrush had fed it for a week it made no signs of feeding itself, so I put it back into its own cage to see if I could get it to pick up for itself. I tried all sorts of dodges with house-beetles, mealworms, and large blow-flies. It would come down on the bottom of the cage and pick them up in its bill, but seemed to have no idea how to get them down: and then would drop them and return to the perch. This went on for two days, during which time I only fed it four times, determined if possible to make it learn to feed itself. The third day I tried it again, but with no more success, so I gave it a good feed, and took it to the same spot whence I obtained it and turned it out on the grass. I visited the place in the evening to see how it was getting on, but could not find it anywhere about the meadow, nor in the wood. I was not sorry, for if it had been anywhere about, and I had not seen any bird feeding it, no doubt I should have taken it home again and tried what a little more patience would do. I only hope it found some kind foster-parents, and that they had a better knack of teaching it to feed itself than I had.

Another experience I had with a young Cuckoo was brought about in a very singular way. I put up a pair of Canaries for breeding, rather late in the season, which went to nest and laid three eggs, one of which got broken and the other two were clear. I thought I would try them with a couple of Linnet's eggs, so I had a ramble and found a nest containing four eggs. I noticed one was a little larger and lighter in colour than the other three eggs, but I did not think anything of it at the time, and brought it away with one smaller one and placed them under the Canary hen. In a few days, after feeding the Canaries one morning, I noticed the hen go to the nest and feed a young bird. I had a look in and was delighted to see that they had hatched out a young bird, and left them in the hope that the other egg would be hatched out by the next day. When I went to feed them the next morning the hen was on the nest, and, being pressed for time, I did not see if the egg was hatched out. On going in, on the following morning, to feed, I found the other egg broken on the floor of the cage, and a chick dead inside. Of course I blamed the hen Canary, and told her what a careless old thing she was—but after investigating matters it appeared that I had wrongfully accused her, for on lifting the nest box out I found, to my great surprise, a young Cuckoo. I fed the Canaries on the usual egg and biscuit, seed, lettuce, etc. On this diet, and nothing else, they fed this young Cuckoo, and the thing grew at such a pace that the nest pan soon got too small for it, so I placed it on the floor in a corner of the cage. It was rare fun to watch the Canaries feed this great thing, about six times their size.

This went on quite a month, when I was called away from home, so I had to leave them in the care of a friend, with full instructions how to feed, etc. I had been away from home about four days, when I received a telegram saying "Canaries dead, what shall I do with the Cuckoo." I wired back, "Turn Cuckoo into garden." When I got home a few days later I learned to my sorrow that the Canaries had died of thirst: the water tin had sprung a leak and had not been noticed as my friend was only able to see to the birds each morning, and it was very hot weather at the time. My friend told me he had seen the young Cuckoo on two or three mornings after he had turned it out, but he did not see any bird feeding it—however, it must have been fed, or it would not have lived so long. I looked round the garden and shrubbery, but could not find any trace of it, so I cannot say whether some kind foster-parent had enticed it away or a prowling cat made a meal of it.



The Story of Bird-Death.

By W. Geo. Creswell, M.D., F.Z.S., etc.

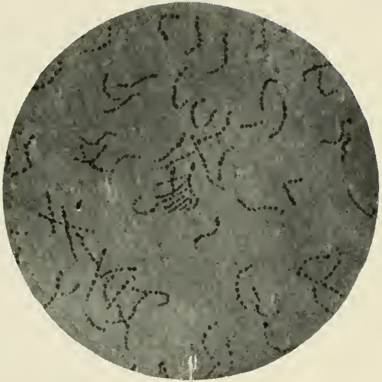
(Continued from page 115).

THE micro-organisms producing the condition known as Septicæmia are of more than one variety, and embrace various subdivisions of cocci and bacilli. Notably however there is one special bacillus which was first described by Koch so long ago as 1878, and which has since received great attention at the hands of other observers, Davaine, Klein, Dowdeswell, R. H. Clarke, etc. To the last named we as bird keepers owe a deep sense of gratitude, for it was he who first brought to our notice the connection between this bacillus and the diseases of birds; while to "*Fur and Feather*" must be accorded a wide meed of commendation for the enlightenment which led that paper to recognise the value of scientific truths, and to publish a lecture in 1898 which had been delivered on this subject by Dr. Clarke before the London and Provincial Ornithological Society on Oct 12th, 1897.

These septic bacteria belong to the division that I have alluded to as "saprophytes," i.e. in an ordinary way they occupy themselves with setting up in dead matter those chemical changes which we call decomposition, and which have the effect of resolving these dead masses into the original component gases and salts from which they were built up as living entities by the influence of light, heat, air, and water, and which are in this way once more set free to be again used in the manufacture of the on-coming generation of animals and plants. Shakespeare was not far wrong when he said—

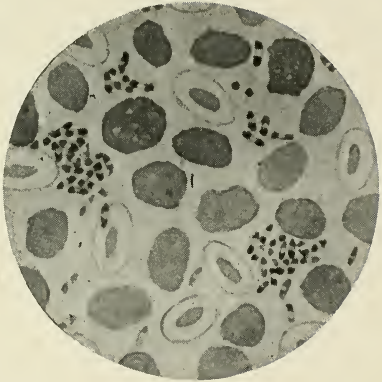
> Imperial Cæsar, dead and turned to clay,
> Might stop a hole to keep the wind away.
>
> HAMLET, *Act v., Sc. i.*

In a crude sort of fashion he had a very fair pre-



TUBERCLE BACILLI (*Human Sputum*).

X 1000.



SEPTIC BACILLI (*Canary Spleen juice*).

X 1000.

Photo. by Mr. East from coloured drawings in the possession of Dr. R. H. Clarke.

To face page [redacted] 153.

monition of what was yet to be discovered as to the marvellous workings of Nature, and the quotation I give, while not actually applying to bacteriology, shews that at any rate he was as much alive as we are to the fact that there is nothing new in the universe, but only a continuous rearrangement of the old, although he was not able to explain the *modus operandi*.

The special septic bacillus of which I have spoken is short and thick, with a length of about three times its diameter. Some individual ones stain only at the ends, leaving the centre light, and some stain all over. At the period of their first discovery and while bacteriological methods were not so well understood and practised as they are to-day, it was supposed that these two forms represented two varieties of bacillus and they were therefore named respectively Koch's and Davaine's bacilli. Now however that more is known of the natural history of these minute organisms we consider ourselves justified in assuming them to be identical in species and to differ individually only in consonance with some phase of development or virulence. Both forms are constantly met with side by side not only in the organs of birds dying of septicæmia but also in culture preparations.

As may be gathered from the saprophytic powers and functions of these cocci and bacilli, they are exceedingly common and widespread—as I have said before their spores exist even in the air in countless myriads. To afford proof of this let me give in detail the particulars of an experiment in their culture, one which has a particular interest for us in our avicultural capacity.

Taking care to have our hands and every utensil involved in the process carefully sterilized, so as to entirely exclude the possibility of importing any bacteria of any kind whatever into the experiment, we will boil a fresh-laid egg perfectly hard: we will then put two small portions of the yelk, slightly moistened with sterilized water, each into a Petrie dish. After two or even one minute's exposure to the air we will place the covers on the dishes and put them away, one into an incubator at a temperature of 100° F. and the other into a cupboard at the ordinary temperature of the air, say about 60° F. Going back to the egg we will make a slide preparation from it, staining with Gentian Violet. This on examination under a $\frac{1}{12}$ in. oil-immersion lense will be found to be quite free from any micro-organism, thus shewing that at the beginning of the short exposure to air the portions in the Petrie dishes were also free from any contamination.

If when twenty-four hours have elapsed we make a film of the egg which has been incubated at 100° F. staining as before with one of the microscopic dyes (Gentian-Violet by preference) in order to throw into prominence any microbes that may be present, we shall find it to be a teeming mass of septic cocci and bacilli, derived from its inoculation during the brief period of a minute with the septic spores contained in the air. The same condition will be found in the specimen at 60° F., but in this case we shall have to wait for three or four days to have gone by, thereby learning that while yelk of egg is always a particularly good medium for the cultivation of the septic bacillus its fostering qualities are considerably influenced by the temperature at which it is kept, and that heat greatly enhances the vigorous growth and development of the bacillus. As a natural corollary to this will follow the deduction that the more vigorous are the bacilli, in consequence of the heat associated with their generation, the more virulent will be their nature and the more able will they be to work harm when they are placed in a position, where from being purely saprophytic in their functions they can become pathogenic or disease producing.

Now since the bacilli or their spores are so plentiful in the mote dust of the air, we cannot wonder that they abound in our houses, on our clothes, on our persons, and of course on our food. And seeing that in addition to their being saprophytes they are also "facultative parasites," or as I have explained, capable under favouring conditions of producing disease, we must ask ourselves why it is that our birds, as well as their owners, are not universally destroyed. The fact of the matter is that there is a constantly existing and never ending battle going on. So long as the animal is above par, so long as those cells of his body, whose special duty it is to repel the attacks of microbic invaders, are maintained in a state of vigour, the victory remains with the attacked. And this is what generally happens, especially when the invading microbe is only of an average degree of power and virulence. But let the defending cells—the phagocytes — from any cause whatever once falter in their attempts to repulse the enemy, then defeat is sure to follow in the shape of disease. If this can occasionally happen when the bacillus is only of average power and malignancy what are we to expect when it has been generated under conditions that raise its virulence to the highest pitch, and when while invading the bodies of our birds, it is supplied with the pabulum which most of all tends to keep it up to the highest state of fighting efficiency? Under such circumstances the result can only be to sooner or later wear out the defenders, however strong and watchful they may have been at the beginning of the fight, and to give over a conquered system to the remorseless sway of the victorious foe.

(To be continued.)

Review.

"*British Birds: their successful management in captivity*," by the late Dr. J. Denham Bradburn. (*Feathered World* office). A third edition of this well known work has now been published, with appendices by the author, Mr. Allen Silver, and Mr. H. J. Fulljames, and should certainly be in the hands of every keeper of British birds.

The great value of this book to the aviculturist lies in the fact that the whole of it has been written in the light of actual practical experience. Hand-rearing is very extensively gone into, not only in a chapter specially devoted to the subject, but in the chapters treating of individual species.

Not much alteration appears to have been made in the original matter as published in previous editions, and not much was needed--for the book is simply a storehouse of valuable information. Many of Dr. Bradburn's pithy sentences deserve to be framed and hung up on the walls of every bird-room. There is scarcely a page of my own copy which I have not scored.

Appendix 1 is by Dr. Bradburn, and treats exhaustively of the keeping of the Nightingale in captivity. This part of the work alone is worth far more than the price of the book—the sound information imparted therein being applicable to many other of the more delicate species.

Appendix 2, by Mr. Allen Silver, partakes somewhat of the nature of a review of the original work, and brings it fully up to date; while a most appropriate finish is given to the book by Appendix 3, which is a reprint of the very practical article by that past master in the art of keeping insectivorous birds, Mr. H. J. Fulljames, which appeared some time since in the *Feathered World.*

Some of the Standards of the N. B. B. and M. C. for Judging British birds are republished and the Club's list of desirable cage birds is also given.

One word seems to me applicable to the illustrations—"Unequal." Some are really splendid, and others could have been very well spared. Among the latter is the tail piece to the volume which is styled "The Bunting." For our part we quite fail to make out which of "THE" buntings the sketch purports to represent. The illustration of the Bullfinch portrays an unmitigated Siberian, and is likely to mislead a novice in British Bullfinches. Many of us would like to have a Nightingale of the size of the one on page 45. The illustration on page 67 is a fair representation of a Lesser Redpoll and a Mealy Redpoll, but is labelled "Brown and Lesser Redpoll Linnets. These are, however, only slight blemishes in a most valuable work, which no lover of British birds can afford to be without.

W. A. L.

British Bird Notes.

A friend of mine has heard the Cuckoo as near town as Peckham—about three miles from the Royal Exchange—a very unusual occurrence.

A non-fancier of my acquaintance has a cock Goldfinch and can vouch for the fact of its having been in captivity over thirteen and a half years.

Mr. Galloway's Swallow, which many of us have seen (last time at the Crystal Palace Autumn Show), has finished its third yearly moult in captivity, and is now in song. It has never had a day's illness during the three years it has been caged. Mr. Galloway succeeded in rearing the following softbills this spring: Green Woodpecker, Greater Spotted Woodpecker, Sedge Warbler, Tree Creeper, Chiffchaff, Lesser Whitethroat, Golden-crested Wren, Wood Warbler, and Wryneck.

Mr. N. Mayer, writing again in July in reference to his hybrids, remarks that all the Greenfinch eggs were clear except one, which was the Goldfinch-Greenfinch. All five youngsters were reared and were then well on the wing. The Linnet of the Linnet-Siskin pair had died, and other Greenfinches were starting afresh.

At the June Committee meeting Mr. Frostick brought with him a pair of Himalayan Goldfinches for the members to view. Although rare in England, it is by no means the first time this species has been seen here. They afforded quite a little discussion as to their qualities for hybrid breeding, and their possible progeny with clear Yorkshire and Yellow Norwich, etc. The birds seemed quite at home and in good health.

Mr. Longden, of Swansea, is very anxious that I should give him the credit of having a *cock* Linnet at the last Crystal Palace Show—whereas I called it a well-marked hen.

Mr. E. Pierce-Williams wrote me as follows in *re* his advertisement in June "Bird Notes": "I had four wires for Lot 1. As yet neither of the other two lots are sold. I have applications galore for individual birds, but as the prices are so absurdly low, I have not even considered the matter of dividing them up. It would take a shorthand clerk a week to answer all the enquiries concerning them. Will you please thank all who have applied, and say that it would be impossible to reply to every one." Now, members, this says a lot for advertisements in "Bird Notes."

Mr. Erbsmehl lately called upon me and shewed me a canary tutor, certainly a very neat arrangement, for teaching young Canaries to warble.

W. A. LOTT.

POST-MORTEM REPORTS.

(*Vide Rules*).

LARK, cock. (Mr. Acutt). This bird died of fatty degeneration of the liver. Taking into consideration the very limited exercise possible in a cage this bird has been too well fed, and should have had a more simple diet.

ZEBRA FINCH, MAGPIE MANNIKIN, and BLACK-HEADED MANNIKIN. (Mr. E. Richard) These birds all died of infectious enteritis set up by the action of septic organisms.

CANARY, young. (Mr. Silver). Died of muco-enteritis of septic origin. The intestines contained swarming masses of septic bacteria.

CANARY. (Mr. Tweed). Congestion of the liver and enteritis were the cause of death.

CANARY, young. (Mr. Tweed). Received on July 15th in the evening; too decomposed for examination.

BUDGERIGAR. (Mr. Mathias). Concussion of the brain was the cause of death. Please send birds immediately after death, otherwise no examination of internal organs is reliable.

BUDGERIGAR, cock. (Mrs. Mortimer). This bird died of concussion of the brain and hæmorrhage, possibly caused by another bird.

CANARY, nestling. (Mr. Tweed). General septicæmia was the cause of death.

CANARY, young. (Mr. Tweed). Septic enteritis was the cause of death.

CANARY, young. (Mr. Tweed). As with the last bird infectious enteritis was present. Egg food is responsible for this; without its being given it is not very easy to infect a *Canary*.

CANARY, nestling. (Mr. Tweed). This bird, three weeks old, was the sole survivor of a brood, the rest of which died after sweating during the first ten days of their life. After thus apparently recovering it died, the principal symptom being diarrhœa. The cause of death was septic enteritis.

CANARY, young. (Mr. Tweed). Died "after 24 hours illness," no symptoms being given. The abdominal organs were much congested.

GREEN AVADAVAT. (Mr. Dart). The day before its death this bird was sent by a dealer. The cause of death was infectious enteritis.

MAGPIE MANNIKIN. (Mr. Dart). Part of the same consignment as the last bird: very ill on arrival, and died the next day. All the internal abdominal organs were intensely congested, and the intestines and spleen contained great numbers of septic organisms.

GOULDIAN FINCH, BENGALI, GREY WAXBILL. (Mr. Hollins). Your letter, dated July 22, bore despatch postmark of July 23, and stated that these birds had been found dead on the *morning of the* 21*st*, the day previous to the day of writing. Unless members conform to my conditions I cannot examine their birds: it is impossible to do so when decomposition has begun.

PEKIN ROBIN and CANARY. (Mr. Bide). Your birds were too decomposed for examination.

GOLD SPARROW. (Mrs. Gorter). This pretty little bird was decomposing and was therefore not available for examination.

TOUCAN, cock. (Mr. Chas. Lloyd). Very few particulars given. Will my fellow members please realise the importance of the conditions attached to the performance of my friendly services on their behalf? The cause of death was septicæmia, in which disease fits sometimes occur. I sympathise with you in the loss of so fine a bird as this, and shall feel obliged if you will tell me what it was fed on.

CANARY, cock. (Mr. Tweed). Markedly anæmic, but the immediate cause of death was septic poisoning. It had been suffering from this for some time.

PEKIN ROBINS. (The Lady Dunleath). Unfortunately all these birds were in a condition on arrival which precluded any information as to the cause of their death being obtained. Decomposition after death from disease proceeds with great rapidity, especially in hot weather, and when post mortem changes are evident nothing of value can be learnt.

GREEN AVADAVAT. (Mr. Dart). Like the others was ill when received from dealer; died next day. Septic enteritis was the cause of death.

BUDGERIGARS, five. (Mr. Salter). All these five birds had septic enteritis in varying degrees of virulence, and so, being ill, had been a tempting prey to the more savage of their companions, who following the custom prevalent among some species of birds had administered the *coup de grâce* by hammering their skulls. This case illustrates the advantage of microscopic examination, as the birds shewed unmistakable external signs of assault.

CANARY, young. (Mrs. Mc.Adam). This bird had not the disease which you feared, but was more anæmic than any bird I have ever seen. Apart from this there was no other disease present.

CANARY, hen. (Mr. Tweed). Septic enteritis and peritonitis was the cause of death. The spleen was much enlarged—nearly an inch in length. If you wish to keep this disease in check, stop all egg food, keep cages scrupulously clean, and wash cage bottoms with a saturated solution of boric acid in boiling water three times a week.

AVADAVAT. (Mr. Dart). Just bought from dealer: death as before due to septic enteritis.

CANARY. (Mr. Tweed). Septic enteritis, i.e. inflammation of the bowels due to septic bacteria.

GOLDFINCH. (Mr. Dart). Death was due to congestion of the lungs brought on by exposure to heavy rain at night.

SERIN, cock. (Mr. Fillmer). This bird died of lung congestion. There were no bacilli present.

CANARY. (Dr. Creswell). *During the last five months this bird has been at intervals fed on material containing (real) tubercle bacilli. Killed with chloroform and found to be quite free from tuberculosis.* She was also free from septic bacteria though the material also contained plenty of them, *but then she had no egg food,* which accounts for their non-development. Canaries are much more immune from septicæmia than are wild birds.

W. GEO. CRESWELL.

Correspondence.

THE PURPLE-CAPPED LORY AND OTHER BIRDS.

Sir,—I have never seen in your pages any remarks on the "Purple-capped Lory," and as I lately purchased one in Bombay Market I am much interested in this bird. I find him (or her—I do not know the sex) a most interesting, amusing, and amiable bird. He has not yet actually spoken any words, though he copies all manner of sounds and seems to hold long conversations in a deep bass tone—which may, for all I know, be Hidoostanee or some other foreign language. I only got him in March last. I carried him across India *viâ* Poona, Madras, Tutacorin, to Colombo, and he proved a most cheerful companion in my travels. He generally amused my fellow travellers very much, and all, particularly ladies, made great friends with him, as he was so friendly and amiable.

He is a very beautiful bird with his brilliant scarlet breast and body, green wings, purple-capped head, and blue stockings. He whistles very sweetly, and if I had a sufficiently good ear to teach him I have no doubt he could be taught any tune. His wings were cropped when I got him from a native in the market, and have not yet grown, but he is allowed to roam about the breakfast room as he likes, and does no harm to furniture, his beak not being adapted for cutting like that of most other Parrots. He is of the brush-tongued kind and laps water like a cat. The tongue is curiously hairy, and is, I think, meant for extracting honey from flowers, of which he is very fond. His mode of progression is by hopping like a Magpie, in that way differing from all other Parrots that I know. I think it will be possible to allow him liberty to fly about when his wings grow.

There was a Colonel of a regiment at Poona who told me that he had one of the same kind at Singapore which he never could tame, so that eventually he gave it up as a hopeless case and enlarged it there, when to his amazement he found that it returned to his quarters every day, until one day a sporting Subaltern shot it, thinking it a wild bird.

I have heard that Purple-capped Lories will breed in this climate, and I should very much like to know if such is the case and also how to recognise the sexes. What is the distinctive coloring, if any? The native from whom I bought him wanted to sell me another bird as the female that certainly was very like the "Purple Cap," with the exception of the cap—his or her head being all over scarlet and the bird considerably smaller in size. As I discovered from a book on Parrots that the hen bird is supposed also to have a purple cap, I discredited the native and refused to buy his bird.

I have applied to dealers to try and procure me a mate, but so far unsuccessfully. The only fault I have with this bird is that if left alone, which he cannot bear, he makes a horrid row and screams in an unbearable manner. Is there any means of breaking Parrots of this horrible habit? His voice when he is attended to and pleased is very pleasing and amusing.

I also purchased in Bombay Market four Pigmy Hanging Parrakeets with blue crown and a round red spot on breast, one of which escaped and two died of cold on the voyage home. One very cold night at Marseilles, the stupid butcher who had charge of the birds, put them into his store in which all the frozen meat for morning use was put the night previous to be thawed. It, of course, must have been like an ice house. The "Purple-cap" very nearly shared the same fate.

I went round the Parrot house at the Zoo, Regent's Park, looking for some similar Pigmies, but I only saw some that had not the remarkable red patch on breast. I cannot make out if they are the same species, and if this is the difference of sexes. The strange habit of hanging from the top of the cage is very curious: they hang just like bats, head down. The head is not inserted under the wing coverts—as is usual with birds, and is generally spoken of as "under the wing," a mode of sleeping unknown amongst birds, though commonly attributed to them.

I brought from the same market four Blossom-heads, three of which died: they were newly caught and very wild, which I think accounted for the mortality. I have one remaining, but he does not seem very interesting. I bought a pair of very nice little birds, the name of which I do not know. I was much taken with them, they sang beautifully even in the Gharry when driving along and were most affectionate to each other, but I had to crowd a lot of birds into one cage to avoid the exorbitant charges of the P. and O. Co. for cages (they charge £1 for each), and the Blossom-heads killed these singing birds.

I got three Doves in Madras Market, very pretty little birds. Two are evidently the same species, blue heads with a black bar across back of neck, the other is spotted all over on a brown ground, round the neck a cape of white moons, very neat, they seem very hardy. W. F. SMITHWICK.

In the Purple-capped Lory (*Lorius domicella*) the sexes are alike in plumage. I once possessed a female of the species which laid and sat—and I believe this has happened before—but I am not aware of any case in which young have been reared, or even hatched.

I am afraid it is impossible to break a parrot of a habit of screaming.

The Blue-crowned Hanging Parrakeet (*Loriculus galgulus*) belongs to a group of birds which require the same food as Lories, but which are without the brush tongue, and are not placed very near to the Lories by ornithologists. The Blue-crowned is probably the best known. The red spot on the throat is absent in the female. H. R. FILLMER.

DR. CRESWELL'S CRITICS.

SIR,—I have derived great pleasure and instruction from the articles appearing in this magazine under the title of "The Story of Bird-Death," by Dr. W. G. Creswell.

I think all will agree with me when I say that we are fortunate in possessing a member so well qualified to investigate and explain the causes of the deaths of our pets. Nevertheless I notice in some periodical comments on the terms used in the articles, in a strain implying that they ought to be couched in more familiar language. I am not a scientific man myself, by any means, but I cannot help thinking that these terms used by Dr. Creswell are not so much beyond the comprehension of any of the members of the F. B. C. To our medical friends naturally the terms would be most familiar, but even to an individual like myself, who is not very well versed in pathology, one line explains another. I believe that most of us are content with the use of the proper terms, and are not disposed to grumble because they are a little out of the common. Dictionaries and encyclopedias are cheap enough nowadays, and will give pretty well all the information respecting these words which we may require.

Considering that "Bird Notes" is, so to speak, a private Magazine, and the members of the two Clubs (who are its proprietors) do not pick to pieces the matter contained therein, it seems strange that one of our authors should be advised how to write his articles, by a critic speaking through a paper which is possibly not read by many of our members.

ALLEN SILVER.

[The reason why Dr. Creswell's articles should be subjected to adverse criticism in some of our contemporaries is not far to seek. But we have perfect confidence in the avicultural public—which is, we know from experience, competent to appreciate the truth when it is put before it. *Magna est veritas et prevalebit.* The day is not far distant when we shall no longer read about poultry dying of "hereditary tuberculosis" "caused by feeding on maize," nor of cage birds succumbing to equally astonishing diseases.—ED.]

THE ALARIO FINCH.

SIR,—I often think it a great pity that the Alario Finch is not imported in greater numbers than it is, as it is a sweet little bird, both as a songster and a pet. The song is far superior, in my opinion, to that of an ordinary Canary, and the mules from it are strong and healthy.

I should be quite willing to pay for a consignment of Alarios if anyone connected with South Africa would send them to me. Perhaps some reader of "Bird Notes" may suggest a means of obtaining a supply of these birds. They are common in Cape Colony.

C. A. T.

Foreign Bird Queries and Replies.*

REARING VIRGINIAN CARDINALS.

Question. Can you give me advice as to feeding Virginian Nightingales while rearing young? They are in an open aviary with Golden Pheasants. They hatched two eggs this spring, and the young birds lived until feathered and then died. The old birds are now sitting again. I am giving at present: seed (hemp and canary), bread and milk, raw meat cut small, and earwigs, etc. *ad lib.* In the spring they had about a dozen mealworms instead of earwigs. The birds are fond of fruit, but I do not give any now. I have been recommended to give them green peas, but my birds will not touch them. E. W. C.

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* All queries are answered by post—a few which appear to be of general interest are published, with the answers, in this Magazine.—ED.

Answer. Success in the rearing of young Virginian Cardinals is quite the exception. In fact, I am not aware of more than half a dozen instances in which the young have survived, though it is comparatively common for them to be hatched in British aviaries.

In addition to the food you are giving, I should supply egg in some form—probably fresh egg and biscuit, such as you would give to Canaries, would be the most readily taken. If you can supply earwigs to an almost unlimited extent, probably they will suffice—otherwise I should give mealworms, and blackbeetles (if you can get them).

You say "about a dozen mealworms"—I suppose you mean a dozen per day.

I should certainly give fruit freely while there are young, as well as at other times, and plenty of green food. It is strange that your Virginians will not eat green peas.

I should be disposed to supply millet seed as well as canary, because it is softer than canary seed. The "Indian" millet or spray millet is the best, but I should offer some white millet as well while there are young, though I do not believe in it as a food for adult Cardinals.

I rather question the wisdom of the raw meat, and should be inclined to discontinue it. It may cause violent purging.

H. R. F.

YELLOW SPARROWS.

Question. Please tell me, through "Bird Notes," all you can about the Yellow Sparrows one sees advertised. Are they hardy, and will they breed in confinement? E. B.

Answer. The bird generally intended when the name Yellow Sparrow is used, is *Passer luteus*. In the male, the whole of the head, neck, and underparts, are sulphur-yellow. The back is chestnut, the quills and tail blackish edged with pale brown. If it were not for the strong, black beak, the bird would be much like a small variegated Canary. The female is brown all over, with a slight wash of yellow in parts.

The Yellow Sparrow is a native of Abyssinia, and is sometimes called the Ayssinian Sparrow. Dr. Russ describes it as peacable in the aviary, but Mr. Seth-Smith found it dangerous. I have had a particularly fine male for about two years, and recently acquired a (supposed) female—which may possibly turn out to be a young male. The cock has lived in a small bird-room aviary with Canaries, Diamond Sparrows, etc., and has never done the least damage. I should not care to trust him with very small birds, but I do not think he would be dangerous unless he were nesting—then he probably would be.

My pair have so far shewn no inclination to nest, but I understand the species has been bred in Germany, and there should be no special difficulty in inducing it to nest in Britain.

The males appear to differ greatly in the degree of intensity of the yellow of the plumage. In many it is a very pale whitish yellow tint, and I have never seen another quite so bright as mine. I am by no means sure that there are not two species going by the name of *Passer luteus*.

I feed mine on canary seed, with a little "Indian" millet, and occasionally a few hempseeds, but I have not tried them out of doors.

Since writing the above, I have been told that some small dealers sell the Saffron Finch under this name—and that any "Yellow Sparrow" advertised at a very low price is probably merely *Sycalis flaveola*. H. R. F.

THE SILKY COW-BIRD.

Question. Would you kindly give me particulars of the Silky Cow-bird, as I cannot find it in any book on birds.

Is it a seedeater? Does it sing? Does it breed in this country? To which country does it belong?

A. R. B.

Answer. The Silky Cow-bird (*Molothrus bonariensis*) a native of South America (Argentina, etc.), is commonly imported into this country, where it is sold under many different names, such as "the Common or Silky Cow-bird," "Metallic Blackbird," or occasionally "Black Tanager." The price is generally about five shillings.

The male is a glossy blue-black all over, with dull black beak and legs; in shape it resembles a Starling, but is distinctly smaller. The female is uniform grey.

In captivity they are birds which are easily catered for, doing well on plain Canary seed with a little hemp occasionally. Mealworms and insects they are fond of, but, as far as my experience goes, they get on well without such additions to their dietary, though when wild they no doubt eat as many insects as seeds.

A cock I have at present has nothing but canary seed in his cage, and, for the last year at least, I should not think that he has had more than a dozen mealworms or more than a pint of other extras, as hempseed, ants' eggs, etc., and on this diet he keeps in perfect health and condition, in a large cage out of doors.

I find these birds do better in a cage by themselves, being steadier there than in an aviary, where they never seem to settle down, but always dash wildly about when one goes near them—and yet when one's back is turned they spend most of their time in tormenting smaller birds.

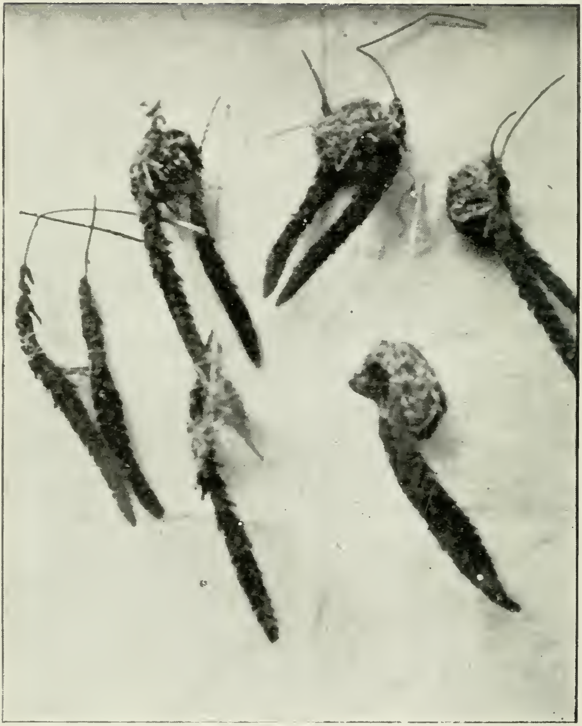
As regards song, the cock when in health is an indefatigable performer, but his song (as I suppose one must call it) can only give satisfaction to himself, as it is nothing but a continuous stream of loud harsh cackles and squeaks (an exaggerated copy of that of a Weaver-bird), accompanied by ridiculous gesticulations and gymnastics, as amusing to watch as his vocal efforts are painful to listen to.

In a state of nature they are parasitic in their breeding habits, laying their eggs in other birds' nests like our Cuckoo, so that in captivity there is hardly the remotest chance of their breeding.

I only once have had a hen, which the cock seemed delighted to see when she was introduced into his cage, but after three days of delight in her company, he must have tired of her presence, as one day I found her scalped and dying, with the murderer on the top perch exulting over his victim.

I am afraid I have not given the Cow-bird a very good character as a cage-bird, though he certainly is one of the easiest of birds to keep in health, but against this must be set his wildness and bad temper; to put it shortly, he is a pet one is likely to soon tire of.

E. HOPKINSON.



NEST OF THE RED-BILLED WEAVER.
Shewing the different stages of construction.

Photo. by H. DART.

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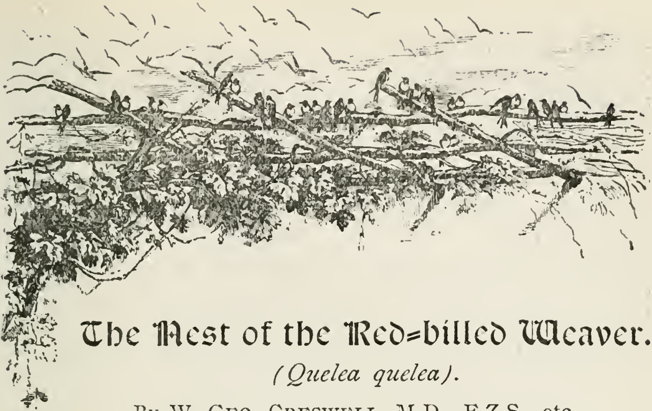


The Nest of the Red-billed Weaver.

(Quelea quelea).

By W. Geo. Creswell, M.D., F.Z.S., etc.

This member of the Ploceidæ, with no song except a few harsh noises, and undistinguished by any extraordinary brilliancy of plumage even when in colour, is nevertheless one of the most interesting of aviary inhabitants, affording constant opportunity during the summer months for admiration and wonderment—admiration for the marvellous cleverness evinced by the male bird in the art of nest building, and wonderment, no less at the mysterious workings of his little mind which prompt him to the exercise of so much fruitless industry, than at the topsy-turvydom which makes him the builder and his wife only a looker on of the most casual and "so-so" variety.

Like all other great geniuses our friend wants but little in the way of plant; a forked stick or a couple of dependent millet stalks amply suffice for a site: indeed I have seen him on one occasion quite satisfied with only one of the latter, as will be seen on reference to the photograph. As regards materials—give him a hayband and he is more than content. With these simple resources at his command he will go on all the summer building nest after nest, to all appearances finding the greatest pleasure imaginable in the exercise of his architectural ability, and seemingly quite oblivious of the joys of courtship and marriage.

Time after time I have watched this bird at work, and have never found his building plans to present any deviation. Taking a hay bent he first of all proceeds to wind and tie it round the millet head with his beak, holding it fast with his feet at the same time. Having thus made one end fast he then in like manner secures the other end to the opposite millet stem. More lengths of hay are treated in the same way until he has fixed enough to warrant their being joined together, so as to make a firm bridge of rope between the two stalks, by means of other bits of hay woven in and out among the original components of the girder. This then forms a secure foundation for the subsequent operations and also serves as a scaffolding or platform for the little builder. The next step is to make an archway above this ; here the original idea undergoes some modification, for instead of making a thick rope stretching across, he uses only one or two strands for this purpose, the others being directed backwards and downwards for varying distances and then bent on themselves and brought back and fastened either to the lateral supports or to the arch itself, and being also interwoven at the same time. The roof being thereby accounted for, the sides and back are made by securely fixing the materials to one of the side pillars, weaving them carefully to the dependent loops of the roof, and then fastening the ends to the other side. In the same way the slightly cup-shaped bottom is then made, and wherever any part of the structure seems thin or weak a piece of hay is used to strengthen it, the result in the end being that the nest feels in the hand like a strong but elastic basket. When my friend had got as far as this on one or two occasions, and seeing that perhaps for want of better materials for lining he was putting some bits of grass into the bottom, I thought he had finished and therefore removed the nests that they might find a place in my collection of natural curiosities. The next one was made in precisely the same way. This for some reason or other was allowed to remain in the aviary, and then to my surprise I found that none of the earlier ones had been completed after all, for now that he had the chance the clever architect put on the finishing touch by building a wonderful pent-house or porch of a somewhat triangular shape over the entrance hole.

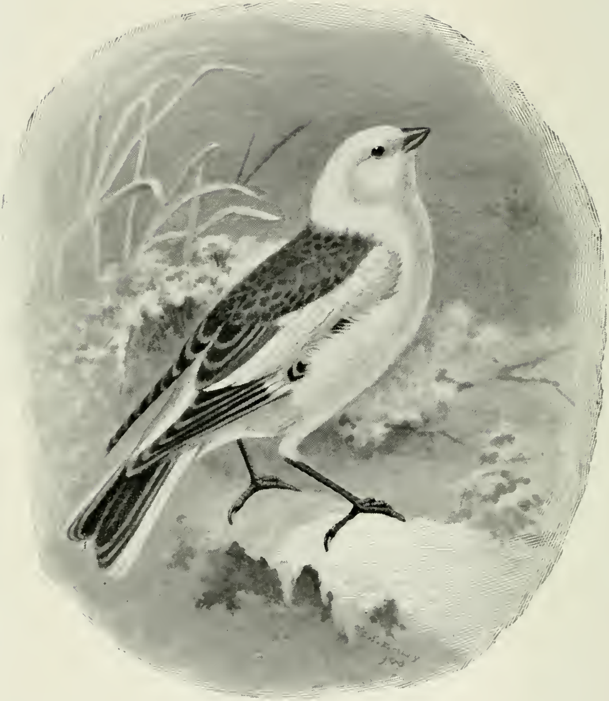
All these different stages can be well seen in the photograph, the lowest figure on the left hand side showing the first stage in the structure of the roof as well as the ingenious way in which a single millet stalk was made to do duty as a nest holder. Not less astonishing than the rapidity with which a nest was built—a day and a half or at most two days covering the whole operation—was the human-like method displayed in weaving the bents. Standing on the original bridge or platform the Weaver would push the piece of hay through the side of the nest for perhaps an inch ; then letting go he would fly around to the back, and while hanging on would draw it through, leaving about half an inch projecting on the inside ; the long end being then picked up was next sharply bent on itself one or two inches from the extremity so that this pointed towards the wall of the nest, through which it was pushed, ready to be pulled taut after the necessary journey to the other side. When after much hopping round and round the whole of the length of hay had been used up the short projecting ends would be neatly tucked in. Whether this was done for the sake of a tidy appearance or to prevent any accident or discomfort it is impossible to say. Certain it is however that the whole design, combined with the engineering skill involved, and the exquisite neatness shewn in the manipulation of such unmanageable stuff as stiff hay, reveals an amount of intelligence which, whether it be purely hereditary or not, commands a very extensive tribute of respect at our hands.

Although I have said that the male bird alone takes upon himself the task of preparing what ought to be, but is not, the family mansion, yet I think it is probable that in the wild state the labour is shared by both sexes. This opinion I base on the fact that occasionally I have seen the female clinging to the nest and pulling on the hay as her husband pushed it through from the other side of the wall, and then in her turn threading it through for him to pull upon. But this happened very seldom ; she usually appeared to live a life of little interest and less ambition.

The Snow-Bunting.

By W. Lowne.

The Snow-Bunting is a regular winter visitant on the East Coast, its numbers depending much upon the severity of the season. It appears generally by the middle of October, but occasionally a few put in an appearance in September ; the earliest specimen I ever remember being taken was caught in August four years ago. If the weather becomes sharp their numbers are increased considerably, when they betake themselves more inland and also to the marshes. Assembled in large straggling flocks or scattered in small detachments, there is no more pleasing combination of sight and sound than that afforded when a number of these birds, backed by a dark grey sky, drop as it were in a



SNOW BUNTING.

From a drawing by E. F. BAILEY, and presented
by him to the N. B. B. & M. Club.
Reproduced at the expense of Mr. C. HOULTON,
of St. Helen's, Vice-President of the Club.

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shower to the ground to the music of their own sweet tinkling notes.

The adult males, with their white wings, are conspicuous when seen in a flock with dark companions, and are easily selected by the gunner who is anxious to obtain a good specimen for a collection of stuffed specimens. The plumage of these birds varies considerably, but young and old cocks show white on the shoulders. Some people are sometimes undecided as to the sex, when they have secured a good hen. But the above marking soon decides the question of sex.

As an exhibition bird, the Snow-Bunting stands but little chance in present-day competition, unless a class is provided for migrant seed-eaters, or Buntings; although I have been very fortunate myself at the Palace and other shows with a steady bird, pure in colour. But it must be a bird caught the same autumn as shown, for they do not improve in colour. I have moulted them and seen others that have been moulted, but they lose the pureness in colour and become dingy and dirty looking. Their legs soon become coarse and look as if they had been caged for years.

These birds are very easy to keep in confinement, and I have found them thrive on canary seed only and become so fat that they get ugly in shape and appear out of proportion. That is, if you happen to meet with a bird that soon gets steady: for if restless the chances are against their putting on much flesh.

Every bird caught does not make a show specimen, however good he may be. Some never become tame enough to be shown. On the other hand, others, which may be steady enough, lack the size and markings required for the show bird.

I consider the beautiful yellow beak in the winter plumage adds considerably to the beauty of the bird, being a striking contrast to the coal-black legs. In the summer the beak becomes dark in colour, both in caged and wild specimens, although one seldom sees one in breeding plumage in this country. Still, I have met with Snow-Buntings as late as the end of March, in fact one was quite in its spring garb, with blackish wings, and had lost that tawny breast marking which to my mind adds to its beauty.

The cage most suitable for keeping these birds in should be at least 18 inches long by 14 inches high and 9 inches deep, with two perches at the bottom and one at the top to give them plenty of exercise. If you happen to meet with one that has the habit of jumping up at the back of the cage, discard him at once.

Vagaries of Popular Pathology.

By R. H. Clarke, M.A., M.B. Camb., M.R.C.S.

(*Continued from page* 147).

Here is another extract from the same source as the last quotation in the September number of *Bird Notes*:— "For typhus, asthma, and "many other diseases to which freshly-"imported and ill-conditioned birds are liable, are "infectious." As to typhus there is not a particle of evidence that any bird ever had typhus when it *was* a prevalent disease. Now that it is practically abolished they have no chance of taking it even if they *were* susceptible, and as regards asthma, if birds really do have asthma, which I doubt, to say that it is infectious is to say it is not asthma. The term asthma is applied exclusively to spasm of the bronchial muscles of purely nervous origin. Spasm of these muscles may be produced by local irritation, bronchitis, etc., but that is not true asthma, which is due to derangement of the vagus nerve, an important nerve supplying the lungs, heart, and stomach; when this nerve becomes deranged and excessively irritable, as it does in true asthma, slight disorders of the stomach, lungs, or heart may set up reflex spasms of the bronchial muscles, and while this lasts, which may be a very short time, wheezing and difficult breathing are present. But neither the morbid condition of the nerve, nor the affections of the heart or stomach which excite it, are in the slightest degree infectious. Here in a few sentences culled at random we have cage birds credited with contagious tuberculosis, infectious asthma, typhus, anthrax, small pox, and last but not least there is that undefeated bird who having sought death in vain by various avenues open to his own species and men and beasts, in his own quiet and effective way, laying no violent and illicit claw upon the vital spark, solves the problem and discomfits the last enemy not by the usual futile resistance to his overwhelming advance but by compelling his hesitating and reluctant attentions. The simplicity of the prescription is captivating. Full directions for all suicidal dicky birds are these—Decide to die, and do it independently of all disease.

I note a little further on that the reader is warned of the dangerous qualities of glycerine, and wonder how this medicament can have earned such a sinister and, I think, unmerited reputation. Is it possible that "the boy" in sampling the contents of the surgery mistook it for syrup and disposed of a Winchester quart of it, producing a good deal of discomfort at the time and a strong prejudice against it ever since? Touching the subject of drugs, I cannot let this opportunity pass without saying that recommendations for their administration to birds are with few exceptions worse than futile. The most common suggestion is to put a few drops of something in the drinking water, as intelligent a proceeding as it would be to attempt to give a course of iron to a human patient by dropping an old knife in the well. The dose of any drug actually taken by a bird under such circumstances is a matter of sheer chance.

One original thinker some years ago recommended a few drops of sanitas in the drinking water as a sure cure for septic fever. As I have shown that the organisms of septic fever will grow in 30 per cent. of pure sanitas the value of two or three drops in a bottle of drinking water can be estimated. Another genius, having satisfied himself that septic fever was typhus, asked his doctor to give him a bottle of medicine which was good for that disease in men, and put a spoonful of this medicine in the bird's drinking water with excellent results. There is no such thing as a medicine for typhus fever; the most that can be hoped from any drug is that it may alleviate certain symptoms which may develop in the course of the disease, and which are rarely identical in any two cases.

Such grotesque absurdities are not exceptions: they are rather samples of common methods of giving medicines to birds. Surely it must be evident to the most elementary common sense that before you can begin to draw any conclusion whatever about the action of a drug you must be absolutely certain of the amount which was taken. Drop doses of ipecacuanha wine will often stop nausea and vomiting; in drachm doses (60 drops) it is an emetic. If you don't know whether the patient has taken one drop or 60, how can you guess whether the drug relieved the vomiting or produced it? Yet as drugs are given to birds, who can say whether they took a proper dose or one hundredth part of it? If bird fanciers have not the patience or intelligence to master the A B C of medication, let them at least refrain from wanton mischief, leave drugs alone, and trust to measures which they can regulate, cleanliness, fresh air, warmth, and good food, and give nature a chance. If they are not content to rest there, let them at least grasp this elementary fact, that if they desire to administer drugs with the hope of doing anything but mischief, they must first settle how they are going to give an accurate dose at regular frequent intervals. This is no easy matter; roughly speaking a man weighs about three thousand times as much as a Canary, and to begin with, that might be taken as a measure of the proportional dose of a drug, and as birds require more frequent feeding than men, so drugs should be given at shorter intervals. If any fancier will solve the difficulty of administering a small dose of any drug to a bird every hour he will have taken the first step—the very first step—toward a rational medical treatment of birds, and as far as I know, no one has ever taken that preliminary step yet.

(To be continued).

Sylvan Beauty and some Birds.

By Geo. E. Weston.

The ripe beauty of the Charnwood Forest is replete with interesting bird-life. The neighbourhood itself, a succession of beautiful valleys and rich woodlands, is altogether charming, and the old-time villages—with thatched cottages, streaky and mossgrown, and great gardens in which glorious roses bloom and fade, and yews and hollies of fantastic shape rise strangely up—a delight to the eye.

The naturalist may spend many happy hours in the lovely dell at the southern corner of that noble park containing the ruins of the one-time home of the hapless Lady Jane Grey. Along the banks of the little tinkling trout-stream, and up the hill-sides, studded with huge boulders of slate and granite and lined with venerable oaks, one sees much that is of interest. Here, seated comfortably among the ferns, my back against a rock, I have whiled away many a summer evening. Save the whisper of the wind to the trees, the world will be drowsily quiet—the birds have long commenced the nightly guard of their helpless brood; the rabbits feed and frolic in ghostly silence. Suddenly the raucous challenge of a Pheasant shatters the still air, maybe answered, from towards the ruins, by the shriek of the Owl, whose form one presently discovers pursuing its phantom-like, noiseless flight.

One may even get a glimpse of that truly weird bird, the Night-jar. Whenever I hear one of these strange creatures, I am always creepily reminded of goblins and gnomes, and witches astride of broomsticks. Its loud chur-r-ring note, curiously vibrative and jarring, uttered as it wheels round the trees in pursuit of the night-flying insects on which it feeds, is easily conceived to be the whirring of witches' wings through space. And when it snaps its wings together, as is its habit, with quite a loud report, one's flesh creeps at the nearness of the rock on which the broomstick caught in its mad aërial flight.

No wonder a mass of silly superstition has collected round such a bird. More than one eërie tale of witches and dark doings conceivably originated in the singular habits of this creature. Coming from its retirement reluctantly, and but little, by day, only pursuing its prey towards and after twilight, it is known to few country-dwellers except by sound—and that is strange enough to excuse almost anything,

It is termed the Goat-sucker in some districts, and the country-folk hold that it sucks the teats of cattle—a quite impossible feat for a bird with such a bill. This misconception may have arisen from its habit of haunting the near vicinity of cattle, hawking the flies which are always to be found in such a quarter, as is also the habit of Wagtails, Starlings, and other devourers of insect pests.

On odd occasions I have been an interested observer of the summary justice meted out 'twixt Rook and Rook. The code of honour of these birds is on a high plane, especially so in matters affecting the rights of property—the maxim, "Possession is nine points of the law," is not tolerated by them. A list of actions accounted offences against the constitution of a Rook colony, could such be compiled, would make interesting, and doubtless astonishing reading. That grievances are thoroughly sifted and justice meted out, according to the rights of Rook law, are known facts. Careful, and apparently reliable, observers have even recorded the strangling of an offender, clearly some incorrigible scoundrel, by his fellow-rooks—a somewhat startling, though to my mind feasible, statement.

When wandering through the park one evening in the early spring I thought the cawing of the Rooks—they swarm the place—unusually deafening. Suddenly the noise was stilled. So unusual an occurrence served to hasten my footsteps towards the headquarters of the colony. Just as I slipped into view the hubbub recommenced, and a number of Rooks flew to an adjacent tree and scattered the sticks of a newly-formed nest far and wide. I realised that I had witnessed the last act (the carrying out of the sentence) of a Rook court-of-law.

One or two observers have been fortunate enough to witness the proceedings in full. It were an easy thing, though, to piece the details of the drama together.

Old Rooks build in the same tree, and in the same fork of the branch, year after year. Young Rooks have to seek out a spot on which to place their future home, and put their nest together by unaided effort. Maybe a sudden gust of wind scatters their hardly-gathered sticks, through inexperience strung loosely together, and in despair they argue, with the dubious honesty of youth, "The old folk have plenty of sticks; they'll never miss just one or two."

But papa Rook keeps close account of his building material. On his return a solemn "caw" resounds from the topmost bough, and in response the old "law-givers" of the colony gather round. As he tells his tale of robbery and plunder they caw forth their execration of such deeds. There is a moment's fateful silence—they are considering their verdict. A few seconds later and the nest of the guilty pair is scattered to the four winds.

The Story of Bird-Death.

By W. GEO. CRESWELL, M.D., L.R.C.P., F.Z.S.

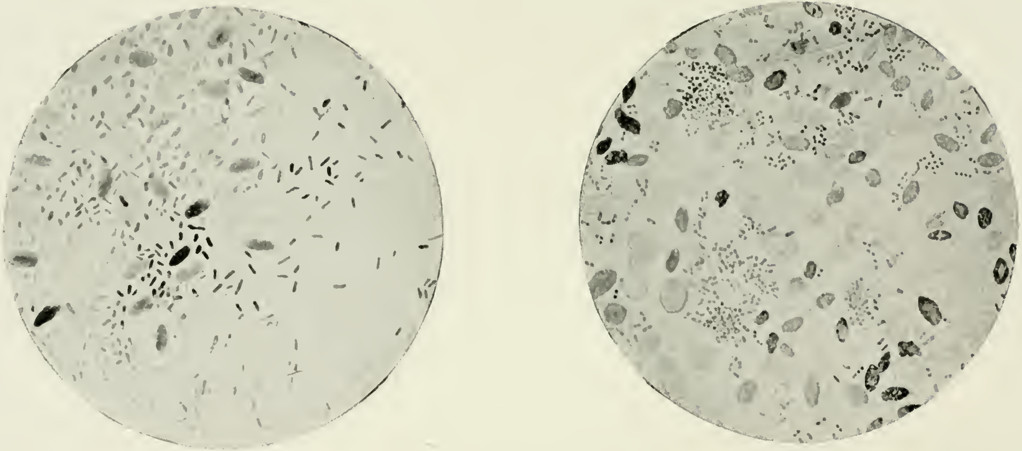
(Continued from page 155).

NOT only may the virulence of the septic bacillus be enhanced by the conditions to which it has been subjected during its development before entering the bird's system; that of its descendants is also most certainly greatly heightened by the influences attached to their environment while they inhabit the alimentary canal of their host. Heat, moisture, and the presence of egg-yelk are, as we have seen in our artificial culture, the most potent of these conditions of enhancement. The effects of heat have been seen in the differing results when in our experiment one culture was made at 100° F. and the other at 60° F. Some amount of moisture is absolutely necessary for the growth of the bacillus—we all know that *dried* meat will keep good any length of time if carefully maintained quite dry and never allowed to become in the slightest degree moist. Egg-yelk is known to be one of the very best media for cultures of our micro-organism. This can, as we have seen, be cultivated in any dead organic matter, flesh, the excreta of the body, dead leaves, broth, milk, and hundreds of other materials, including of course white of egg. But in none of these does it seem to attain to that vigour of pathogenic power which is induced by its growth in yelk of egg. That it should be so vigorous when associated with this substance is probably due to the oily nature of the latter, but whatever the reason may be, the fact remains that the bacillus has a special affinity for it.

By this time my readers will not need to be told that all these three conditions, which favour the action of the bacillus, exist in the case of birds fed upon egg-food. The egg is there, the moisture is there, and since the normal temperature of a birds' blood is something about 109° F., the heat is there also—with a vengeance.

Heat and moisture by themselves are not sufficient to render the bacillus invariably pathogenic, because so long as a *strong and healthy* bird is fed on *simply seed and water and sound greenstuff* he can swallow the spores of the bacillus and even the bacillus itself (as he must of necessity be constantly doing), without any harm accruing to him. A cage and its appurtenances, unless they are frequently and periodically boiled, swarm with septic bacilli, revelling in the bird's excreta and in the inevitable slime in the corners of the drinking glass; but except in the very rare instances of such a bird becoming debilitated by some ordinary disease, or in the commoner one of his being newly caught, nothing need happen to him. He takes in the bacilli; the digestive juices settle the greater proportion of the unwelcome visitors; and the phagocytes account for any that migrate into the blood stream. And happily this is what goes on from day to day.

An account in his own words of one of Dr. Clarke's experiments will make the preceding plain: "I got two strong, healthy Canaries, A and B; they "were fed on seed and water only. A's food and "water were freely contaminated with a culture of "characteristic septic bacteria bred in putrid egg. "B's food and water were contaminated with the "excrement of A. Neither bird showed the slightest "ill effect and the excreta of both birds were almost "entirely free from bacteria. After allowing sufficient "time to elapse to make sure the birds were quite free "from disease, the experiment was repeated, but both "birds were given plenty of fresh hard boiled egg. "Almost at once the excrement of both birds was "found to be swarming with characteristic bacteria,



Usual form, staining throughout (*Koch*)
x 550.

Rarer form, with bi-polar Staining (*Davaine*).
x 550.

SEPTIC BACILLI.
(*Canary Spleen juice*).

Photo. by Mr. EAST from coloured drawing lent by Dr. R. H. CLARKE.

To face page 183.

"and they sickened with typical symptoms of septic "fever, but whilst A completely recovered, B died in "a few days, presenting the characteristic signs, "enlarged spleen, infilterated with nodules and "swarming with typical bacteria, which were plentiful "throughout the other organs and the blood."*

Here we see, first, how little effect the parasites had on the birds so long as their diet was only seed, and secondly, how much effect the egg had in the direction of stimulating the bacteria to the extent of a fatal virulence. Special note must be taken of the fact that B was fed in both experiments on food contaminated with merely A's excrement. In the second one, A, on a *diet comprising egg*, was given some bacteria derived from an egg culture. This produced an attack of one of the types of Septicæmia, which made him very ill, but from which he ultimately recovered. The bacteria which were the source of *his* trouble had been bred, I believe, at a temperature of about 60°. Anyhow 100° would be the highest to which they had been exposed. Now mark what happened—the bacteria descended from those, and developed in the egg food in A's intestines at a temperature of anything between 110° and 114°,† and then transferred to B simply through the medium of the former's excreta, had, by reason of their development and life in the great heat of a sick bird's body, become of such intense virulence that B was speedily killed. That the latter as well as the former was being fed on egg was also a factor in the result.

Can we any longer wonder how the epidemics of what is (in some quarters) still called "tuberculosis" are caused, and why during the epidemics the type of the disease increases from a comparatively mild degree of virulence, which is fatal to only the weakest birds, up to a deadly form which sweeps away anything and everything in the shape of a cage bird that is exposed to the infection, and that is not individually either wholly or partially immunized against it?

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* *Fur and Feather*, Reprint from, 1898.

† During acute illness the bodily temperature always rises, sometimes as much as 5° or 6°.

Now let us see how an epidemic of Septic Fever can spontaneously occur. The case I cite happened in Dr. Clarke's own personal experience, and the evidence is therefore that of an observer trained in those logical methods that alone are of any value in the investigation of pathological problems. Some years ago he had a garden aviary put up for his wife, which was built so as to ensure constant fresh air to the inmates, and which was kept under the most scrupulous conditions of cleanliness. For some time previous to 1887, when the following occurrences took place, and also during that year, no fresh bird had been admitted to the establishment; therefore we can eliminate the possible factor of infection having been brought in from the outside. Towards the end of the breeding season the birds began to drop off in a a mysterious fashion: Mrs. Clarke sent for a veterinary surgeon—an expert in birds—who came and examined them, took away some dead bodies for autopsy, and in due course sent in his report, diagnosing tuberculosis. Dr. Clarke, who at the time was specially engaged in original research in this disease, was naturally glad to embrace so favourable an opportunity of studying what seemed to be a spontaneous outbreak of the avian variety, and therefore took down, to the laboratory where he was then working, some of the dead bodies for the purpose of making cultures and microscopic slides. To his great surprise the enlarged and nodulated spleens and livers yielded no tubercle bacilli, though of the various forms of the septic bacterium there were more than enough in the different organs. In the study of Pathology nothing however in the shape of morbid material is wasted by a worker; Dr. Clarke therefore set himself to investigate the epidemic so handy to his door. He had previously noticed that all the first cases were among the breeding birds and that these birds were being supplied with egg food. He also noticed a fact with which all observant breeders are well acquainted, viz., that for the first two or three days of the young birds' life the old ones either eat their excreta or at least remove it in their beaks from the nest, passing immediately to their alternative occupation of feeding the young with the egg and other food. Now with all the care in the world no one can guarantee that never shall some minute morsel of egg become septic in some corner of aviary or cage; and so the birds were fulfilling precisely the same conditions as I have before described as necessary for the production of this fell disease. The bacilli, which exist everywhere, infected the egg; the egg with its bacilli was swallowed; while in the bird's intestines these bacilli rapidly multiplied by their own method of fission; and consequently the new generations of them, propagated as they were in the most favourable environment, became progressively more and more virulent. Add to these facts the additional one of what may be called the "circular system" and the picture is complete.

It would thus seem that the production of an epidemic, or at any rate of a few cases of infectious septic disease is a simple matter. Not by any means that egg is a "first cause"; it is nothing of the sort, but it *is* a specially favouring agent (or second cause) which often turns the balance between conquering or being conquered on the part of the bird when invaded, as it pretty constantly is, by the bacillus. This latter is the true first cause, and it is quite sufficient of itself to set up disease, independently of the help of egg food at all, in some races or in some individuals of other races of birds, provided that it is vigorous and plentiful, and that it meets with a lowered power of resistance in the individuals it attacks. Absolutely immune individuals will repel the bacillus and destroy its toxins with or without egg food. But why, by means of the agency of egg food, should we assist the bacillus to destroy those birds which, while not altogether immune, would have been able without it to have successfully resisted? Why, when a battle is raging between the phagocytes of our birds and the invading bacilli, should we step in and supply the enemy with just those munitions of war which enable it to trail our own flag in the dust?

An incident that happened in the bird-room of one of the members of the Foreign Bird Club in May, 1902, affords a very pertinent commentary on what I have just said. During that month, so I am informed by this lady, she lost over fifty Canaries that were in her breeding cages at the time, and that were being fed according to the usual custom on egg food. In telling me this she goes on to say:— "One very "strange thing happened; all the time my Canaries "were dying I had in the same room an aviary full of "foreign birds and I never lost one of them." In a subsequent letter she tells me that she never gave the foreign birds any egg food at any time, and that all they ever had in addition to their staple food of canary, millet, and rape seed, was an occasional meal of ants' eggs and oats.

Now what was the determining cause that led to the exemption of these birds from infection? That the germs of the disease were carried to them must be beyond doubt. They permeated the air of the room; they swarmed in the seed tins, in the rinsings of the water vessels, in the dusters and brushes. and on the scrapers, and would be found in more than plenty on the hands of those who attended to the cleaning etc. Any one with even the most elementary knowledge of bacteriology knows so much, and every one with the slightest experience of attending to a bird room can readily call to mind a hundred different ways whereby he would unconsciously transfer germs to all the other cages from the one in which they had first effected a lodgement. That foreign birds, both great and small alike, are susceptible to the particular form of septicæmia that the Canaries were dying of is equally beyond doubt. *Post mortem* investigations—even on the part of those who so constantly mistake the disease for tuberculosis—have decisively settled that point. Immunity therefore cannot be pleaded any more than that there was no access of infection. But it looks to me as though the escape from sickness and death was very intimately connected with the absence of egg from their dietary, and that the whole circumstance can only be regarded as strongly confirmatory of the views held by Dr. Clarke and myself.

(To be continued.)

Breeding Avadavats.

By Henry Dart.

For the first time since I have kept foreign birds, which is now about twenty-five years, I have been successful in breeding Avadavats. I have had nests from two pairs, and both pairs must have gone to nest about the same time, for the young left the nests within a day or so of the same date. I did not notice that anything was going on until a very short time before they were hatched. I then saw that both pairs had two little white eggs. One pair hatched the two, the other pair only one. All three young ones are now flying about the aviaries and feeding themselves.

I have five aviaries in my garden, which I can, by opening the doors of communication, make into one. The Budgerigars (the largest birds I keep) had two of the aviaries to themselves. The rest of the birds (of which I have about seventy) were in occupation of the other three. In the middle of the summer I found I could not spare the time to attend to the birds properly while in separate aviaries, so I opened the doors and let them all fly together, and to my surprise one pair of the Avadavats went into the Budgerigars aviary, took possession of one of the cocoanut husks, and there reared their two young ones. The other pair built their nest in one of the small travelling cages in their own aviary. The pair that built in the Budgerigar's aviary have again gone to nest in the same place and at the present time (September 10th) have three eggs. I was a little doubtful at first as to whether I should be able to rear the young, as I always understood they required live insects, and were consequently very difficult to rear—for when I succeeded in getting live insects, they were soon eaten up, there being so many birds in the aviary to share them. I had one of those balloon fly catchers in my kitchen, and every morning I used to put it in the oven, for just long enough to suffocate the flies that were in it, and then I threw them into the aviary. That was the only thing I gave them different from their ordinary food. I always keep sponge cake in my aviary, but I never use egg food, for I am always afraid of their picking up a piece that has gone sour, which it is very likely to do in hot weather. I have never seen the avadavats eat any sponge cake, but they did eat the flies.

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Since writing the above, I find that the pair which had three eggs have only hatched one, and an going on all right. The other pair built again a very pretty domed nest with just a small hole at the side for them to enter by, placing it on the top of a cocoanut husk that was hung in a corner: unfortunately, some other birds have pulled it partly to pieces, and destroyed the solitary egg it contained; I find they have repaired it, but it is not now such an interesting nest as it was at first, for it is now almost like a Canary's. Dr. Creswell, who saw it in its original condition, wanted me to photograph it, but unfortunately I put off doing this until too late.

POST MORTEM REPORTS.

(*Vide Rules*).

Black Grouse, cock. (Mr. Pycraft). This bird, six weeks old, in addition to having gape-worms (Syngamus trachialis) in the wind pipe, also manifested the usual abdominal appearances of septicæmia. More particularly the central two inches of one of the cœca (measuring eleven inches altogether), was occupied by a cheesy tumour practically filling up the calibre of the gut. This was attached on one side to the gut wall, leaving elsewhere just enough space for the passage of the bowel contents. Here was a typical case of "tuberculosis," which had it fallen into the hands of some people would have satisfied all the conditions attached by them to that disease, irrespective of the fact that the bird had only had six weeks of life in which such a chronic disease could have produced so large a growth.

This growth, the contents of the large bowel, and also those of the small intestine and cœca, showed however no tubercle bacilli under the tests for that form of parasite, but they were all crowded with septic organisms. The liver also showed a few isolated bacilli.

Zosterops, cock. (Mr. Fillmer). Recently bought with another which died in two days, this bird was ill from time of purchase until its death, and general septicæmia was the cause of death.

Baya Weaver. (Mr. Swan). At the time of purchase four days before death was apparently well. The body was well nourished; the intestines shewed a condition of enteritis of septic origin.

Budgerigar, cock. (Mr. Mathias). The intestines and spleen were much congested and shewed septic bacilli. A vessel was ruptured in the brain.

Silverbill, cock. (Mr. Fillmer). All the internal organs were congested, the intestines being olive coloured. Microscopically the intestines shewed that the enteritis was septic.

Avadavat, hen. (Mr. Dart). Egg binding was the cause of death.

Chicken. (Mr. Fillmer). The liver was very congested, and one of the large vessels in it was ruptured. The intestines were also congested, and the peritoneum thickened. The posterior edge of the left lung shewed a large patch of grey infiltration containing a pyæmic abscess. Microscopically the liver, intestines, and lung all contained septic organisms.

Spermophila. (Mr. Fillmer). This bird, just bought from a dealer, died on day of arrival. It presented in every respect the tpyical appearance of what among Fowl, Rabbit, and Cage-bird Fanciers is always mistaken for tuberculosis, i.e. it died of acute and virulent septicæmia, or septic fever.

Canary, hen. (Miss Nicholson). This bird died of pneumonia. At some time or other she had evidently had septicæmia from which she had recovered.

Cockatreel, hen. (Mr. Slatter). Enteritis, or inflammation of the bowels was the cause of death. The treatment adopted was quite useless. especially the outward application of castor oil.

Canary. (Mrs. Butler). Acute epidemic septicæmia or septic fever was the cause of death.

Dwarf Finch, hen. (Mr. Fillmer). All the abdominal organs were much inflamed, or rather congested. The immediate cause of death was enteritis of septic origin. I am inclined to think it had been ill a week or two but of this I cannot be sure.

Canary. (Mr. Kenny). This bird died of septic inflammation affecting the intestines, peritoneum, and the sacs which invest the heart and lungs.

Canary. (Mrs. Butler). Like the other bird, this died of septic fever. (*Vide Rules*).

Canary, cock. (Mr. Cordery). Fatty degeneration of the liver caused death in this case. The bird was very fat: overfeeding combined with deficient exercise was responsible for the condition.

Toucan. (Mr. Lloyd). With reference to this bird (report as to which appeared in September), and in answer to letter of the 2nd inst: the disease it died of *was* infectious, in spite of another Toucan having been put into the cage without ill effects. Not every person in a diphtheria house contracts diphtheria for instance. The original cause seems to have been (1) the egg in the food, and (2) the soaking of the food before being given.

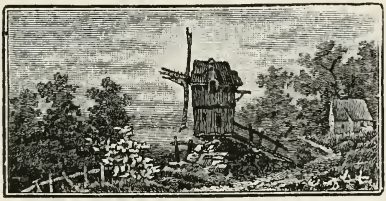
Cordon-bleu. (Mr. Fillmer). An epileptic fit was the cause of death. Probable causes:—(predisposing), over fat condition; (exciting), fright.

Canaries. (Mr. Cordery). I am sorry to say that you are again the victim of septic fever in your bird-room, both these birds having died of it. As they were newly acquired they may have brought it with them, but of this I cannot be sure.

Bicheno Finch. (Miss Barns). Gastro-enteritis was the cause of death.

Pennant Parrakeet. (Mr. Salter). This bird died of pneumonia, the anterior portion of the left lung being the seat of it. The demands made on the system by the moult would give her less resistive power against the disease. No treatment beyond warmth would have been of any avail.

W. Geo. Creswell.



Correspondence.

WANTON DESTRUCTION.

Sir,—A melancholy spectacle for lovers of British birds was afforded a few weeks ago in the shape of a glass case containing no less than a hundred specimens of stuffed Kingfishers which was offered at auction in a London sale-room. It is some satisfaction, however, that the object did not produce much competition, and was not sold. The inscription on the case reads: "Group of Kingfishers caught in Leicestershire, 1898-9, by W. Burton." The person who would "catch," not even with the sporting excuse of shooting, a hundred of these beautiful birds for the purpose of stuffing their dead bodies, deserves the further notoriety which is hereby given him.

H. J. Fulljames.

GOLDFINCHES.

Sir,—I have a Goldfinch which has been kept in a large cage with one other. A short time ago I noticed he was quite bare on one side of his face. On catching him I found he had a large swelling over the eye, in fact the whole side of the face seemed very much swollen ; the next day the eye closed up. I bathed it with warm water, and after a day or two the eye opened, but I thought the sight was destroyed. This, however, was not so, and that eye seemed to get all right. To my astonishment, on going to see my birds yesterday, I found the other eye very much swollen and quite closed up. I cannot account for it in any way.

I may add that directly I noticed the first eye swollen I separated him from the other finch.

A. B. Craddock.

I believe it is by no means unusual, in the human subject, for iritis, when cured in the eye first attacked, to appear shortly afterwards in the other. A case of this sort came under my notice a few months ago. Doubtless the same thing might occur in birds.

H. R. Fillmer.

BULLFINCHES.

Sir,—In reply to a question asked by a member, and repeated verbally by you, in reference to his Bullfinch not being able to moult, I may say that my Bullfinch was very ill from the same cause, and I tried what ripe fruit would do; but he would scarcely touch it, and it apparently did not supply what he needed. I then tried the soft food I give to my Indian Shâma and Song-Thrush, the principal ingredients of which are hard-boiled egg, Spratt's crissel scalded, and ants' eggs. This food acted like magic on the bird, I could see an improvement the very first day. I find what he likes best is the white of the egg, and, as far as I can judge, he sucks the goodness out of the ants' eggs and then drops them.

His favourite seed is linseed; he picks this out in preference to hemp. But I refrain from advising what seeds to give, as I think the best way is to find out what your bird likes most. But remember the soft food for all finches during moulting time.

Arthur Jones.

A POPULAR AUTHOR ON VOLUNTARY DEATH.

Sir,—I see that the harsh, cold light of science has been somewhat cruelly turned on to that beautiful and poetical thought which is enshrined in the commonplace statement—that birds can die when they have a mind to, and in spite of their being healthy in every organ.

As some sort of defence of the originator of this idea, I venture to quote the following extract from an article by F. Harvey Major, dealing with his experiences on the West Coast, and published in *Chambers's Journal*, June 20th, 1896.

"When the *Forcados* arrived I went on board, and after "reading my letter asked Tom Diaper, the captain, for the "birds.

"'Very sorry, old man,' he replied. 'but they are gone the "way of all flesh and feathers. Dead—every one.'

"Seeing some scores in cages under the bridge, I asked to "whom they belonged. 'Oh,' said Tom, 'those are my birds.'

"'Well, yours seem healthy enough; it's a singular thing "that mine should all die,' I remarked.

"'Ah, quite so,' replied Tom, and then added impressively, "'but mine never do die — they know me too well — *they* "*daren't*.'"

The context of the above story tells us that these birds were Parrots; even allowing for their being a little above the ordinary grade of avian intellectuality, we still have it distinctly laid down by Capt. Diaper, (and he should be an unimpeachable authority, as being a man who had carried hundreds of Parrots), that birds can by an effort of will, and in obedience to fear, actually abstain from death, presumably even when diseased!

This conclusive evidence ought to make Dr. Butler's critic reconsider the position he has taken up with regard to the converse.

By the way I hear that there has been lately discovered a physiological *rara avis* in the shape of a Parrot that is if anything a little too healthy! Whatever can this mean? It is stated to be a good fault, but that throws no light on the mystical announcement. W. GEO. CRESWELL.

Foreign Bird Queries and Replies.

All queries are answered by post. A few which appear to be of general interest are published, with the answers, in this Magazine.

SOFT FOOD FOR BUNTINGS.

Question. In the May number of "Bird Notes" Mr. J. A. Swan states that the Nonpareil should have soft food every day in addition to seeds. I have one of these birds now which refuses everything in the way of soft food except mealworms. I have tried everything I can think of but to no purpose, and as I do not wish to starve the bird, I should be glad to hear if you know of any soft food that it would eat.

This is the third Nonpareil which I have had, and they have all refused soft food. H. S.

Answer. Any good insectivorous mixture will suit the Nonpareil, such as Century, or Abrahams', or a liberal home-made one. My bird had Abrahams', sharing it with several others. When I first had him, they only received soft food about twice a week, but the Nonpareil became so constipated that (after curing him without difficulty by a bread-and-milk diet) I gave it to them every day, with happier results. The bird, however, was evidently constitutionally inclined to constipation, for though his illness did not occur again for some months, it was eventually the cause of his death. To the last, however, I had no difficulty in curing him by the bread and milk, but after each attack he became weaker, and at last had not strength to recover. I am inclined to think that had he had the soft food more liberally when first I received him, his weakness would not have developed.

A good home-made food can be prepared by mixing equal parts of ants' cocoons, dried flies, yolk of egg * (flake), adding to this twice its bulk of powdered biscuit (Osborne for preference). This will keep for any length of time, and when required for use, should be moistened with cold boiled potato (mashed) or grated carrot; some aviculturists use lard in preference to either of these.

But let us see what our masters in aviculture say: Dr. Greene, in his "Favourite Foreign Birds," says "It must be "remembered that these birds are mainly insectivorous, and "cannot live on a diet of seed alone, which they cannot digest "in any quantity, and which, if persisted in, will cause "constipation and fits, from which so many Nonpareils die "in captivity." Dr. Butler corroborates this, and adds: "Ants' "cocoons as bought will answer the purpose"; but as my bird *always* had a trough full of cocoons within reach and yet became ill, I can hardly agree with this. J. A. SWAN.

COCKATIELS NOT BREEDING.

Question. I have been trying to breed Cockatiels for some years, and this year managed to hatch three, but they were all thrown out of the nest one at a time. I had two pairs in the aviary—was this the cause? A. R. B.

Answer. If one's experience with Budgerigars is any good, I should be inclined to think that your years of non-success and the final destruction of the young may possibly be accounted for by the fact that you have three hens and one cock instead of two pairs. With Budgerigars at any rate, I find an excess of hens is fatal to success: the inquisitive visits of the unpaired hens to the nests of their more fortunate sisters doing a lot of harm.

Another cause of young birds being thrown out of the nest is a sudden fright in the night, especially severe thunderstorms. Only the other day one of my hen Budgerigars, who has successfully reared numbers of young, threw out of her nest, during the last severe thunderstorm, five healthy half-grown youngsters. E. HOPKINSON.

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* Since the above was written I have had the privilege of reading Dr. Creswell's article, "The Story of Bird-Death," and should omit egg in any shape or form.—J. A. S.

British Bird Query and Reply.

TREATMENT OF A MAGPIE.

Question. Would you kindly give me some advice about a Magpie. Ever since I have had him he has been wheezing, and breathes very loudly. I fancy he must be suffering from asthma. He seems very well as a rule, but any sudden change in the temperature seems to affect him.

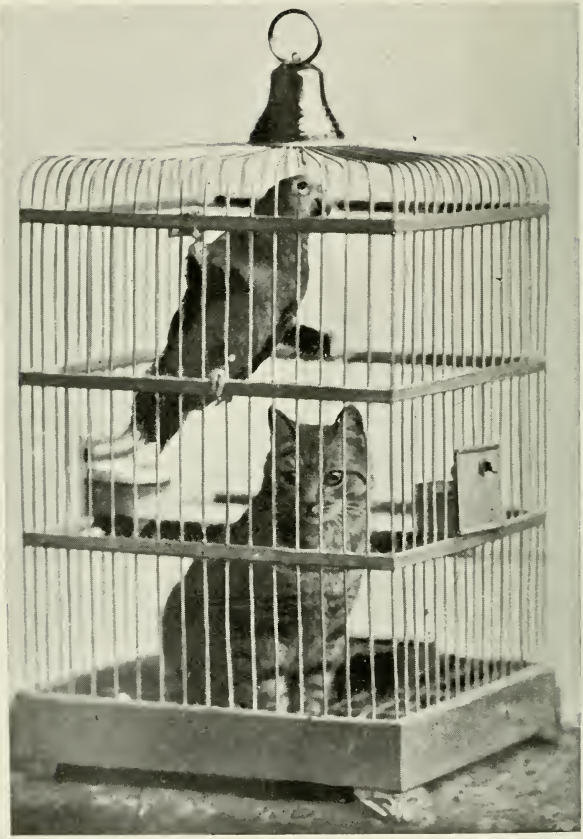
Is there any cure for him, or can I give him anything to alleviate his sufferings? The food given is insect food (home-made, containing a large proportion of egg food), insects when procurable, fruit, and occasionally a little minced meat. He was much troubled with vermin, but seems better after several good applications of "Keating's." A. W. H. H.

Answer. The querist omits two important items in his inquiry re Magpie, viz. the size of the cage it is kept in, and the ingredients of the "home-made" food it is fed on.

From my experience I am of opinion that Magpies ought never to die in captivity from any cause other than old age. I have always found them very hardy birds, which thrive well on the plainest diet; but from their size and large appetites it is most essential that they be kept in a large cage where they can exercise themselves thoroughly. Then, if provided with a frequent bath, or occasionally sprayed with the garden syringe, they will not be troubled with vermin of any kind. It shews bad management to have to resort to Keating's or any other insect powder. The best cure for, or rather prevention against, vermin, is cleanliness and plenty of water.

I should say the Magpie is thoroughly out of order, and, to begin with, I should give a purgative in the shape of Epsom salts (half a teaspoonful dissolved in a wine glass of hot water). Then give a change of food. Minute insects are no good for such large birds. Feed on some good Thrush's food, mixed crumbly moist with grated carrot or cold boiled potato (first pressed through a sieve), chicken meal (without the shell-grit) scalded, can be given on alternate days. This ought to form the staple food, which can be supplemented occasionally with a little lean beef finely chopped, with a mouse or dead Sparrow for a change. As all the Crow tribe are practically omnivorous, an occasional hard-boiled egg and scraps from the table will never come amiss.

Of course, if the bird has caught cold, which I doubt, it must be kept free from draughts, and, during the moult, as warm and quiet as possible. Cover the cage bottom with *damp* cocoa fibre refuse, and let the perches be about an inch and a half in diameter so that it can rest its feet firmly on them. JOHN FROSTICK.



PARROT AND CAT, belonging to Mrs. FRANK ATTWELL.

"They are very great Chums—the cat, when quite a little kitten, *would* get into the cage, and they played together like two kittens. The parrot is delighted when the cat comes into the cage, and they play together even now that the cat has grown so large."

To face page 197.

The Story of Bird-Death.

By W. Geo. Creswell, M.D., L.R.C.P., F.Z.S.

(Continued from page 187).

Having dealt with the part played in the production of septicæmia by the conditions under which the virulence of the bacillus is increased, and having discovered that bacilli propagated at a low temperature are not so powerful for harm as those which have been developed at high temperatures with egg yelk for a nidus, it now remains for us to consider those influences which are inherent in the birds themselves and which are of so much importance in connection with the same process. I allude, of course, to the varying degrees of receptivity of the disease on the one hand and to those of immunity against it on the other hand, which are found to exist in different species and in different individuals.

This is naturally a difficult subject on which to discourse clearly to those who have never paid any attention to biological problems. It is so wide in its scope, and there are so many factors to be reckoned with, that at first I thought of leaving it alone altogether and of contenting myself with my previous meagre allusions to "strong and healthy birds," and to "temporarily diminished power of resistance" as occurring in individuals. But judging from the tone of many letters I have received, I am so conscious of the why and wherefore attitude cropping up among my readers, that I am constrained to devote at least a few lines to the question.

Immunity against any given disease may be regarded either as *individually acquired* or as *racially hereditary.*

Acquired immunity exists generally in connection with those diseases, which by some as yet imperfectly understood action of their toxins on the tissues through the medium of the blood serum, actually guard the individual who has had one attack from having another for a greater or less period of time, this period varying somewhat indefinitely according to the idiosyncrasies of the disease and the individual alike. Thus for a short time one attack of pneumonia confers immunity against another. Small pox and its modification (vaccinia) confer immunity, if not actually for life, still for a considerable number of years. Measles, scarlet fever, etc. are again examples of diseases which as a general rule give immunity against themselves to the individual who has had the good fortune to survive the first attack. Advantage has been taken of the natural law involved in the above, and immunity against certain diseases is now with more or less success being sought for by means of inoculation with serum, obtained from animals that have been themselves inoculated with the attenuated virus of the diseases as they originally exist.

But this acquired immunity, however produced, is only partial in its benefits ; like all other characteristics acquired during life and not inborn, it is not transmissible to posterity; and, therefore, since it cannot affect the life history of the *race*, it is only of limited importance to us while regarding the subject of septicæmia, except in so far as the following experiment of Pasteur's bears on the subject. He found that by exposing the septic bacillus (obtained from cases of chicken cholera) to the air for long periods, "its virulence became so reduced that inoculation with the weakened or attenuated organism gave rise to a comparatively mild disorder, which however sufficed to secure immunity against further attacks" * in the inoculated specimen. So far as this question applies to the attenuation of the virus, it bears out the observations of Dr. Clarke and myself as to the effects which heat and cold have respectively on the power of the bacillus for harm, and although I have not instituted any definite experiments bearing on the statement that a previous attack of septic enteritis grants immunity against the disease, it would yet seem very probable from general observations that such is the case. Moreover, without very definite evidence to the contrary, one would be loth to question the authority of this distinguished observer.

But while, as we see, this acquired individual immunity protects only isolated individuals, it is quite otherwise with racial, and therefore hereditary, immunity. Again we must look to the human races for examples, selecting those that as far as the facts connected with them are concerned, are indubitably established and accepted. The negro of the West Coast is immune against yellow fever ; compared with his white brother the negro of any part of Africa is impervious to malaria ; on the other hand the white man, when exposed to these diseases, not only almost immediately contracts them, but generally finds them fatal to him,—at any rate, the former of the two. In like manner the European, living in countries where the tubercle bacillus is abundant, is so comparatively immune against its resultant disease, that only about one out of every ten deaths from all causes is due to it ; and moreover most of the cases are very chronic in their course, thus showing the amount of resistive power that the inhabitant of these countries has attained to with respect to this particular disease. Viewed merely as an absolute fact all this may appear

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* Dr. Murray, in *Green's Pathology*, 9th edition, 1900, page 287.

bad and unhappy enough to us, but let us compare it with what has happened and is happening in other countries. Previously to the advent of Europeans in the islands of the Pacific Ocean tuberculosis was an unknown quantity, and indeed it remained an unknown quantity so long as the only visitors were the lawless, though healthy and non-consumptive, buccaneers and traders of the earlier days. But no sooner did the more fragile, and occasionally consumptive, missionary set his foot on the land than—what happened then ? The student of Pacific history, more especially if he prosecutes his studies on the spot, will soon learn that while the missionary often got robust and well from the effects of his open-air environment, his unfortunate flock, infected by the comparatively small number of bacilli disseminated from the single focus of infection afforded by their pastor, died of phthisis wholesale, like a flock of rotten sheep or a herd of rinderpest oxen. And not only did they die, but they were not long about it. The same fate at the hands of tuberculosis awaits nearly every negro—and indeed every ape, if we can believe our observers—that visits this country to reside in it, and I am told in many quarters and on the very best Canadian authority that the Indians of the far West of America and those in Canada will at no very distant date be completely removed from the face of the earth by the same cause, "and this too in a climate whither," according to Dr. H. M. King, of New York University, "white persons rendered more immune by heredity, are sent as a therapeutic measure when themselves suffering from the same malady."

Examples can be multiplied with ease :—Measles has for ages been in itself regarded as of not much account by the British matron : when first introduced into the island of Fiji in January 1875, (by some passengers arriving from Sydney in H.M.S. Dido), it went about like a roaring lion, but so far from seeking *whom* it might devour it solved any such difficulty by speedily devouring all that came within its reach. Within six months it killed 40,000 out of a total population of 120,000. Take again the disease of inborn hereditary craving for alcohol, of course leaving out of account that variety which is due to habit caused by the special environment of the individual, and which is therefore properly regarded as an individually acquired characteristic to be dealt with, as it is, by education and public opinion. Here we find whole countries, such as Spain and Portugal, comparatively immune against the disease of inborn drunkenness. A certain amount of immunity, though less in degree, is found among those Central African tribes who have been accustomed to periodically brew palm beer and to drink it while fresh, i.e. also periodically. But, says Archdall Reid in one of his articles on Heredity,* "other savages, such as those inhabiting the New World, America, Australia, and Polynesia, who have never manufactured alcohol in even the most dilute solutions, delight in it so intensely that, given the opportunity, they drink to their own extinction," and so are shewn to possess no immunity at all.

Coming nearer to our own special subject:—the Kaffir, finding on the veldt a dead and half putrefied ox, rejoices greatly, calls together his friends and relations, and with them settles down to an orgy of gluttony in which goodness knows how many pounds of septic entrails and meat are eaten per head. Anyhow they can actually be seen to swell as they keep on for hours eating the revolting stuff amidst the awful smell. The only result is that they sleep the deep sleep of repletion, digesting their filthy contents the while, and wake up happy, contented, and ready for their usual occupations. On the other hand let an average Englishman, used to more cleanly feeding, eat the veriest trifle of tainted meat or fruit, especially in hot and muggy weather, and his medical adviser immediately has on his hands a case of zymotic diarrhœa due to septic enteritis. Ask any Medical Officer of Health what are the results on the death and sickness rate among children due to the use of that modern invention, the feeding bottle, with its long india-rubber tube containing, as it does, a constant supply of septic organisms, but which is cleanliness itself compared with the putrid and disgusting dainties of the Kaffir.

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* *British Medical Journal*, Sept. 16, 1899.

This seemingly abstruse question of racial immunity is after all quite easy and simple to understand: it is purchased merely at the expense of long contact with whatever disease against which the immunity is being slowly obtained: in other words it is an outcome and example of that universal law of Natural Selection and Survival of the Fittest which has been so fully and ably interpreted for us by the greatest of modern philosophers.

It will not be necessary in the application of this law to the previous examples to traverse the whole list—let us take any one of them, say the extreme instance of yellow fever, where complete immunity has been obtained. Here through ages and æons of ages the negroes have been continuously exposed to the attacks of the special bacteria of this disease, those showing the least power of resistance being the first to be swept away and destroyed, and being thus removed from the chance of propagating a progeny with the like weakness of resistance. On the other hand the survivors, in obedience to the natural law that like tends to produce like, would beget a progeny containing a certain proportion of individuals with an inherited greater or less power of resistance. This progeny being in its turn weeded out by the destructive fever, and the same process of elimination of the most unfit being carried on during every successive generation, the result has very gradually, but none the less surely, come about, that there are no longer left any members of the community that are susceptible to the disease, and that the race as a body is now hereditarily immune against it. And exactly the same result would happen in the case of white men did we but send out sufficient numbers in the first place to make a fair start, and then give them time to work out their own salvation. An acquaintance of mine, who had sufficient resistive power inherent in his constitution to withstand a twenty-five years' residence on the Gold Coast, and to come back to England to enjoy good health in his retirement, would have been a fair sample of the sort of man required to help in the foundation of an immune white race.

Now let us see how all this fits in with and explains the difficult problems and apparently contradictory facts that present themselves in relation to the occurrence of septicæmia in birds. By long habitude all birds, like indeed all animals, are, when in health, more or less immune against the action of such septic organisms and their spores as are found in the air and on the common inanimate objects of the earth's crust, since as we have seen, the bacilli propagated at a low temperature and on poor food are comparatively incapable of producing much harm. Consequently wild passerine birds living in a perfectly natural state appear to suffer but seldom from the disease. But, as I have pointed out, the bacillus bred amidst the environment of increased heat, such for instance as the one which generation after generation has been passing through the intestines of birds a t 109° or 110°, is another thing altogether; and so on entering into captivity for the first time the birds are as little immune against the intensified toxin of the bacillus contained in the shipper's box and the dealer's cage, *and representing to them a new disease*, as are the white Europeans when first introduced to the yellow fever. It is indeed more than possible that they are even less immune, for whereas the European goes within the sphere of influence of the yellow fever of his own free will, and is fortified by a sea voyage in fresh air, by good food, and by a general adherence to his customary hygienic conditions, the bird enters *his* new environment under conditions specially adapted to lower his general tone, and to weaken his resistive power against a hitherto (to him) unknown agency for evil. The mental and nervous shock attendant on forcible and sudden capture, and the intense and concentrated fear of human beings and of the rest of his new surroundings, are in themselves quite sufficient to so modify his natural power of resistance as to render him specially susceptible to the results of overcrowding and its deleterious concomitants of filthy air, filthy water and filthy food, all swarming with virulent micro-organisms. This then explains the truly awful mortality which obtains not only among our newly-caught native small birds,* but also among foreigners while on their voyage and during their storage at either end of it. Those that survive the earliest and preliminary stages of captivity are just the select few who for the time being have the greatest faculty of resistance, having either entirely succeeded in resisting infection, or who, having been infected, are either going to ultimately recover or else to eventually succumb after a more or less protracted fight. The end of these last would only be affected in point of time by the administration of egg, that is to say they would die equally with and without it: in the case of the middle division the giving or withholding of egg food is just the last straw in the determination of the issue: while those birds, who constitute the first and emphatically much the smallest section, would probably be able of their own inherent and individual strength to withstand its influence, some for a time, some for perhaps always. These birds are the analogue of my friend who, though exposed for twenty-five years to the terrors of West Africa, yet has all along been in perfect health, and is so still. But I have so far come across no one who points to him as a "proof" that West Africa is a health resort for white people, whereas we can all of us recall those who are so wedded to the *post hoc* experience method of argument as to hold up with conviction these picked birds as a "proof" that egg is innocuous and even beneficial.

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* I once knew a case where a catcher and dealer succeeded in selling only two dozen Goldfinches out of ninety-two dozen. The rest all died in his house, and it is most probable that some of the two dozen that were sold did not live long.

Insectivorous birds, having always been in the way of getting hold of more septic bacteria than their seed-eating brethren, are more immune than they are, though this natural tendency towards immunity is invariably more than neutralised by the egg-food which is always given to them in obedience to that worst of all masters—tradition. Quite recently I had sent to me for examination a splendid Wood Warbler, belonging to a well-known amateur and exhibitor, a member of the N. B. B. and M. C., and a person of great humanity and cleanliness in the treatment of his birds. This bird, which was in good condition as to flesh and plumage, simply swarmed with the bacilli of septicæmia, some being present even in the lungs, a very unusual habitat. On enquiry I found to my surprise that the owner himself had caught it only a fortnight before it had come into my hands! Here there was no question as to the cleanliness or otherwise of its surroundings; but not content with giving it abundant—nay, under the circumstances, more than abundant—both fresh and dried insect and vegetable food, he must needs give it preserved egg in addition; against the intensified virulence of the bacilli generated in this delightful material the bird was of course not immune. It was like the majority of negroes when brought to England, and placed under the influence of our indigenous tuberculosis; and the class of insectivorous birds can be well compared with the civilised European, as regards the effect that a septic diet has upon them both. They can each of them, as a rule, ingest a certain amount of more or less attenuated virus of septicæmia without experiencing much harm, but neither of them can withstand even a small dose of the intensified toxin thrown out by vigorous bacilli propagated and nourished under those conditions which most favour their progressive development. Beyond this there is little doubt but that if insectivorous birds were fed on a less nitrogenous diet in captivity than they are, they would fare better and live longer than they do at present. There is as much difference between a Tom-tit at liberty, who has to work hard all day to find his living, and one in a cage or aviary with plenty under his nose for the picking up, as there is between the village blacksmith and the mercantile clerk. The blacksmith with unimpaired metabolism can eat to his heart's content without much harm accruing; feed the sedentary worker in the same way and trouble is bound to result from the disproportion between secretion and excretion. And to pursue the analogy a little further:—While the average blacksmith and wild Tom-tit respectively have each of them individually developed sufficient resistive power to enable them to successfully withstand the attacks of infectious germs up to a certain point, the oo well-fed specimens of the captive bird and city clerk genera possess a much lessened power of attaining to a like victory when their turn comes to be assailed.

(To be continued).

Titmice.

By H. J. Fulljames.

(Continued form page 143*).*

When I mentioned, at the commencement of this article, that there were seven species of birds coming under my heading of Titmice, it had escaped my memory that the Crested Tit had been taken out of the list of British birds drawn up by the N.B.B. & M.C., it having been contended that the bird did not appear sufficiently often in these islands to give much probability that any exhibited specimen was other than a foreigner. Of course, arguments on either side of the question would be out of place in this paper, but I may at least say that I should like to see the bird re-instated in our list. The extreme shyness of the Crested Tit, so much in contrast with the boldness of most of the members of the family, is probably the reason of its being so seldom observed. It does not breed either in England or Ireland, indeed I believe that it has never been seen at liberty in Ireland at all, and that the recorded instances in England are very few, but in the pine forests of the North of Scotland I have been told that it is not nearly so rare as is generally supposed. On the Continent it is a fairly common bird, and it is undoubtedly the case that most of the Crested Tits which have been seen at our bird shows have had an assisted passage to our shores. I have not found them long livers in captivity, but I am afraid all my specimens have been imported birds which had suffered considerably by the hardships of their travels and subsequent bad treatment at the hands of the importer, who did not know, and did not care, how to feed them. I should have little fear of losing a Crested Tit, however, if I could obtain a Scotch-caught specimen. It is not so strictly insectivorous as the Long-tailed Tit, and should, therefore, be some degrees easier to keep in captivity.

The handsomest of all the British Tits is the Bearded Tit (*Panurus biarmicus*, Linn.) and this bird is at the same time quite the easiest to keep in health in captivity. In freedom they live for a part of the year on the seeds of the reeds among which they find their habitation, and their capacity for digesting these renders it a comparatively easy matter to keep them in captivity. A pair of Bearded Tits in a roomy cage furnish as pretty an ornament to a room as could be afforded, even by any of the more gorgeously plumaged foreign birds; but it is in an aviary that these beautiful birds are seen to the best advantage. I have always kept mine in a large aviary amongst a mixed collection of British and foreign birds, and have never had occasion to devote special trouble to them. They would come at any time to my hand for a mealworm while I stood inside the aviary, but their cleverness in darting behind any obstacle which offered itself made them difficult of capture with a net when I wished to cage one for exhibition. As they are shown, of course, in the British classes, it was only necessary to catch one bird, and the interchange of 'ping-ping' between the captive and his mate left behind in the aviary were continuous until he was removed from the bird-room.

The peculiar gracefulness of the Bearded Tit is well shown in the illustration published in the September issue of the Magazine, but no black and white drawing could, of course, even suggest the beautiful gradations of color, ranging from a rufous brown to a buffish white, possessed by the living bird.

A conspicuous ornament of the male is the black moustache which gives it the name of Bearded Tit. The hen is without this distinction, at least so far as color is concerned, (she has a moustache, but the lengthened feathers are white, and merge into the white of the throat), and is in other respects not so bright in color as the male. In length this bird reaches to nearly seven inches, and well deserves its popular name of Reed Pheasant. It is sometimes called the Least Butcher-bird, and its head certainly bears a striking resemblance in miniature to that of the Red-backed Shrike, alhough the bill is yellow instead of black, and lacks the dentirostal projection possessed by all true Shrikes.

Before the drainage of the marshes of the Eastern counties the Bearded Tit was fairly common, but latterly it has been feared that the birds were gradually becoming exterminated, and when the list of British cage birds was compiled by the Committee of the National British Bird and Mule Club it was a very moot point whether the Bearded Tit should be included. During the last year or two, however, well authenticated instances of its frequent breeding in England have been recorded, and its inclusion in the list has been fully justified. Apropos of the at one time reputed extreme rarity of these birds in England, an anecdote of my own experience may not be uninteresting, and will have its application in more modern instances, in other connections, which will be within the knowledge of many readers of this article. The first pair of Bearded Tits which were ever offered to me bore in their appearance every indication of Continental origin, but the dealer, when I expressed my opinion to this effect, answered my doubts by offering to produce a written statement that they were hand-reared nestlings taken in Norfolk. The very next day, in quite a different part of London, I met with nine pairs of Bearded Tits which the shop-keeper told me formed part of an imported consignment of ten pairs, one of which he had sold two days previously to the dealer who had offered to furnish me with a certificate of birth with my pair!

It will be gathered from the purport of this article that I scarcely recommend the keeping of Tits in separate cages. An opportunity of exercising their incessant activity seems to be a necessity of their well-being, and nothing short of an aviary will really afford this. If, however, the attempt be decided upon, the cage should be a roomy one, and should be made in such a way that a living branch from a shrub or bush may be provided for the birds, instead of, or in addition to, the usual perches. Such a branch will afford exercise for the birds, and a relief for their feet, and can be thrown away and replaced by a fresh one when soiled.

Breeding Bicheno's Finches.

By J. J. Foulis.

It has often been said that unless housed in a good sized aviary with natural surroundings the rarer foreign finches will not breed successfully. The following record of my experience will show that such is not always the case, and may, I trust, encourage those of our members who have to content themselves with cages for their pets.

In June last I purchased a male Bicheno's Finch, bred in this country, which I kept by himself until, in the middle of July, my efforts to procure a genuine female were rewarded and I found myself the possessor of a rather dilapidated specimen. (I had purchased four birds as females, all of which were males.) I kept the birds in separate cages for nearly four weeks, and at the end of that time both were in fine condition and fairly tame. I put them together in a large cage of the box pattern, with wire in front only, and measuring 4 ft. long by 3 ft. high, and 2 ft. deep, fitted with two doors in the back, with little shelves for seed-hopper and water fountain respectively, and a door on the top at the right hand corner to admit of access to the nest. The cage was also fitted with two trays, one for sand, the other for earth (renewed every other day), and these were made to pull out at the back. I placed the cage facing a bow window, and arranged several pots containing the usual window plants in front of the cage, to make the surroundings as natural as possible. In the right side of the cage I fixed a small fir branch, and at the top of this a circular wire structure, which I lined with moss. In this the birds built a nest of hay, feathers, and pieces of chickweed, commencing operations within an hour of their entry of their new abode and finishing the nest the first day.

Having previously spoiled the efforts of other pairs by too much examination of the nest, I determined to leave this pair alone, and did not even peep at the nest for fully four weeks, when I found three tiny youngsters. Five eggs had been laid, one being unfertile, and the fifth I found on the floor of the cage, where it had evidently been laid, as it was unbroken.

I fed the birds on white and spray millet, and a mixture of yolk of egg, ants' eggs (so-called), and grated carrot, but this mixture was seldom touched, so I discontinued it. I also supplied chickweed fresh every morning, and, after discovering the young, I gave a few mealworms cut in halves at 7 a.m., noon, 5 p.m., and 7 p.m.

The three young are now nearly as large as the parents, but still have the tiny white beads on each side of the gape, and the two black bands on the breast are very faint, in fact, when sitting puffed up they are hardly distinguishable.

Since the young appeared the hen has laid four more eggs—three in the nest and one on the hearth-rug in the room—(I occasionally allowed the parents to fly about during the day).

I had failed to breed these birds before, in the ordinary flight cages, and I believe my success on this occasion is largely due to the method of constructing the cage, whereby the necessary attention can be devoted from the back, without disturbing the birds.

Migration and Superstition.

By Geo. E. Weston.

In Birdland it is the time of the great autumn migration, when the birds of the summer and the sunshine wing their way to those Southern climes where summer is perpetual, and the rays of the sun lose not their warmth.

The Swallows are going ; so, too, the Nightingale, and all those feathered warblers which love the roses and the glamour of the flowers. The only one to bear with us the wretchedness of the winter time is that universal favourite the Robin. Blessed with a courage beyond his kind, he leaves the now deserted plantations and ventures to our very doors. His familiar strains, tinctured with melancholy and a hopeless sadness, voice his regrets of those happier days—days of slumbrous sunshine and of southern winds that whispered drowsily through the trees.

Every spring and every autumn, year in and year out, witnesses the same phenomenon : the spring, the flitting of the birds to those lands best suited to the rearing of their young; the autumn, their return to a land where they can hope to find food and warmth, and escape the icy rigours of the winter. The instinct that guides the little creatures over thousands of miles of land and sea is truly miraculous.

The routes they follow in these journeyings never vary, and can be accurately traced on a map. That they have been transmitted from generation to generation through countless ages is undoubted, though we can only guess at the means by which they are understood. Though the mystery of migration has been a theme of comment in all ages and in all lands, it is, as Professor Newton remarks, still a subject on which "our ignorance is immense."

Wallace's theory that food is the mainspring of migratory movements appeals to me as feasible and conclusive. Terming the summer area the breeding area, and the winter area the feeding area, he observes: "Now, if we suppose that the two areas were (for some remote ancestor of the existing species) coincident, but by geological and climatic changes gradually diverged from each other, we can easily understand how the habit of incipient and partial migration at the proper seasons would at last become hereditary, and so fixed as to be what we term an instinct."

It is difficult to realise the myriads of birds that make these journeys; hour after hour, day after day, thousands and thousands of them are continually winging on their way. As the autumn nights fall, millions of little fleeting creatures pass over our heads unseen, unheard. Only observers at favourable points on the lines of flight can form any accurate conception of the immensity of their movements. One flock of Gold-crested Wrens, seemingly most delicate and fragile of birds, was estimated to extend over a surface of many miles.

The late Herr Gätke (to whom naturalists are indebted for much invaluable information) as an observer on the island of Heligoland, over which the migratory hosts pour like a torrent, speaks of "square miles of birds, as a dense snow-storm driven by a light breeze." This too, for many days in succession.

Before the theory of migration became an accepted fact—and that is little more than a century ago,—many were the conjectures of naturalists to account for the disappearance of those harbingers of the spring, the Swallows. Some of these, in the light of present-day information, seem not a little ludicrous, yet they were undoubtedly founded on certain habits of the bird—habits imperfectly understood, however, and often embellished by the aid of a lively imagination.

Aristotle and Pliny believed that Swallows wintered in the hollows of rocks, and during that period lost their feathers. The former part of this opinion was adopted, later, by many learned men.

Olaus Magnus, Archbishop of Upsala, was the first to suggest that they passed the winter at the bottom of the Northern lakes, immersed under the ice, or lodged beneath the waters of the sea, at the foot of rocks. He gravely informs us that these birds creep down the reeds, in the autumn, to their subaqueous retreats, and that in the aforesaid lakes clustered masses of them, mouth to mouth, wing to wing, and foot to foot, are often found by the fishermen, who, on discovering such a mass, throw it into the water again. That the good Archbishop did not lack credulity, is apparent from the fact that, having stocked the bottoms of the lakes with birds, he stored the clouds with mice, which, he declared, sometimes fell in plentiful showers on Norway and the surrounding countries!

Incredible though it may seem, some good observers in our own country were firm believers in the theory of the submersion of Swallows. Klein,* who strongly supported the doctrine, gives the following account of their manner of retiring in the autumn, received, he states, from some countrymen. These good souls asserted that "a number of Swallows would form a large mass by clinging together with their feet, and so commit themselves to the deep. Others would unite in laying hold of a straw with their bills, and so plunge down in society. Others, again, assembled in numbers on the reeds, till the latter broke under their weight, and sank with them to the bottom." And their immersion, these observers add, in a delightfully artless manner, was always preceded by a dirge of a quarter of an hour's length.

The L. & P. O. Autumn Show of October, 1903.

FOREIGN BIRDS.

THERE will be three Bird Shows at the Crystal Palace this winter, and it is not surprising that some people are getting confused about them. First, there is the usual Autumn Show of the London and Provincial Ornithological Society which has now been held at the Crystal Palace for some years past—this is the Show to which the following notes relate. Then there is the London Cage Bird Associations' Show, which will this year be held for the first time at the Palace (in December)—this is the Show in the management of which the N. B. B. & M. C. and the F. B. C. are taking an active part, and it will certainly be, so far as Foreign birds are concerned, *the* Show of the season. Lastly, there is the Show held in January or February by the L. & P. O. S., and which is the rather degenerate successor of the old "Crystal Palace Show" proper, which used to be held by the Crystal Palace Company.

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*This Klein must not be confounded with Klein the bacteriologist.—ED

The Show we have now to deal with never attracts a very heavy entry of foreigners, for the classification is by no means liberal. This year there were 106 entries, which is 13 more than last year, and, we believe, a record entry for this Show. The classification was not satisfactory, and seemed to be the Club classification for nine classes—slightly altered, and spoilt in the process. The Show was held in a tent in the nave, and the light and temperature were both satisfactory. Mr. Swaysland was the Judge.

Class 63. *Budgerigars and all species of Love-birds.* Ten entries, two absent. First, Mr. Storey's celebrated Peach-faced Love-birds. Second, Messrs. Driver and Hunt's pair of Yellow Budgerigars. Third, Mrs. Cooper's Green Budgerigars. Fourth, Mrs. Cooper's Love-birds. V.H.C., H. B. Smith. H.C., Hopkinson. C., Howe.

Class 64. *All species of Parrakeets, Lorikeets and Lories.* Seventeen entries, three of which we could not find, though only one was marked "absent" in the catalogue. First and Special, Mr. Hawkins' Varied Lorikeets—if this is the same pair as this gentleman exhibited in February last they have greatly improved in health and condition. Second, Mr. Frostick's, fine Crimson-wing. Third, Miss Little's Alexandrine. Fourth, Mr. H. B. Smith's Pennants. V.H.C., Smith (Crimson - wings). Hawkins (Tuis), Babb (Crimson Lory). H.C., Smith (Ring-neck), Smith (King), Thwaites and Lloyd (Barnard). C., Smith (Andaman Ring-neck, *Palæornis magnirostris*), There were some rare birds in this class—a pair of Red-collared Lorikeets (*Tricoglossus rubritorques*), a pair of Brown's Parrakeets (*Platycercus browni*), and a Violet-backed Parrakeet (*Tanygnathus everetti*)—all passed unnoticed by the judge.

Class 65. *Grey Parrots, and all species of Amazons, Cockatoos, and Macaws.* Nine entries. First and

Special, Dr. H. Lister's Black Cockatoo—which we took to be a female *Calyptorhynchus macrorhynchus.* Second and Special, Mr. Hector's pair of Grey Parrots—an unusual exhibit. Third, Mrs. Cooper's Blue and Yellow Macaw. Fourth, Mr. H. B. Smith's Red and Blue Macaw. V.H.C., Cooper (Blue-fronted Amazon). H.C., Brownlie (Grey). C., Smith (Blue-fronted Amazon).

Class 66. *Certain named common species.* Sixteen entries, one absent. First, Messrs. Thwaites & Lloyd's Parson Finches, which, although a meritorious exhibit, would not have been our choice for first place. Second, Mr. Picard's Diamond Finch. Third, Mr. Johnson's Zebra Waxbills (very fine indeed). Fourth, Mr. H. B. Smith's Java Sparrows. V. H. C. Hopkinson (Orange Weaver), Hopkinson (Ribbon Finches), Hawkins (Diamond Finches). H.C., Townsend (Zebra Waxbills), Smith (Parsons). C., Cushny (Orange Weaver). It is a pity that Mr. Theobald's Larger Baya Wever (*Ploceus atrigula*) was entered here in error — it was in immature plumage. Some Yellow Sparrows (*Passer luteus*) were also entered in this class by mistake—they appeared to be two cocks. A Crimson-crowned Weaver was also wrong-classed.

Class 67. *All other species of Waxbills, Grass-finches, and Mannikins.* Fifteen entries. One absent. First, Dr. Hopkinson's Spotted Firefinch (*Lagonosticta rufopicta*) which well deserved its place. Second, Mr. Hawkins' rare Fire-finch (*Lagonosticta niveiguttata*). Third, Mr. Hawkins' *Pytelia melba.* Fourth, Mr. Hawkins' *Pytelia afra.* V.H.C., Townsend (Lavender Finches), Hawkins (Black-rumped Finches). H.C., Hawkins (Parrot Finches), Woodhouse (Sharp-tailed Finches—incorrectly catalogued as Striated Finches —why are these names so frequently reversed in error ?). C., Cooper (Long-tailed Grassfinches).

This class also contained some Pintailed Nonpareils, Gouldian Finches, and a hen Aurora Finch.

Class 68. *All species of Grosbeaks, True Finches, and Buntings*. Fifteen entries. First, Mr. H. B. Smith's *Emberiza melanocephala*. Second, Mr. Frostick's Desert Trumpeter Bullfinches. Third, Mr. H. B. Smith's Olive Cuba-finches (not in the best order). Fourth, Mr. S. G. Bass's Red-crested Cardinal. V.H.C., Thwaites and Lloyd (Indian Crested Bunting—a very rarely imported bird which ought to have been higher up), Hawkins (Grey Singing Finches). H.C., Housden (pair of Brown-throated Cardinals, *Paroaria cervicalis*), Housden (Green Cardinal). C., Merrick (Siberian Goldfinch). Dr. Hopkinson's Grey-headed Sparrow, an interesting and rare exhibit, was unnoticed. There was another Brown-throated Cardinal in this class.

Class 69. *All species of Tanagers, Sugar-birds, Sunbirds, Honeyeaters, Zosterops, and Bulbuls*. Fourteen entries. First and Special, Mr. Frostick's Magpie Tanager (*Cissopis leveriana*)—a rare bird in fine condition and well shown. Second, Mr. Townsend's *Chloropsis hardwickii*—a splendid specimen, but being by no means specially rare it scarcely deserved its position above rarer birds in equally good condition. Third, Mr. Swan's very nice Blue Sugar-bird. Fourth, Mr. Townsend's Gold and Green Tanager—surely this very rare bird deserved the second place better than the Bulbul? V.H.C., Townsend (Tri-coloured Tanager), Townsend (Japanese Zosterops). H.C., Housden (Large Seed-eating Tanagers of the genus *Saltator*, the precise species rather doubtful, probably *S. aurantiirostris*). Mr. Swaysland exhibited a single bird (not for competition) which we believe to be of the same species—but some thought this to be an example of another species. C., Smith (White-crowned Tanager, a very inferior specimen to Mr. Swan's well known winner).

Class 70. *All species not comprised in the above.* Ten entries. First, Mr. Russell Humphrys' Rufous-bellied Niltava Flycatcher (this charming bird was in splendid condition and well deserved its place). Second, Mr. H. B. Smith's Purple-headed Glossy Starling. Third, Mr. Townsend's Andaman Starling, which would have appeared to more advantage in a larger cage. Fourth, Messrs. Thwaites and Lloyd's Lettered Aracari, one of the smaller Toucans. V.H.C., Hopkinson (Yellow-backed Whydah). H.C., Smith (Shamah). The fact that an Eclectus Parrot and two Whydahs were both properly entered in this class, which is primarily intended for insectivorous birds, is sufficient to show the peculiarities of the classification.

We have pointed out a few of the points on which we differ from the judging, but the work appeared to have been done with care, and on the whole met with general approval.

POST MORTEM REPORTS.

(*Vide Rules*).

Canary, hen. (Miss Nicholson). This bird died of infectious pneumonia, and from what you tell me the others appear to have done likewise. The one which I examined in September shewed the lungs to be full (as to the affected region) of the micro-organisms to which this disease is due.

Canary, cock. (Miss Nicholson). Like the former bird this also died of pneumonia. This disease is very prevalent just now, the bacillus being communicated from one bird to the other, and finding them ill prepared to withstand its attacks by reason of the bad weather and the demands made by the moult on the blood corpuscles.

Rosella. (Mr. Salter). Treatment of this bird was hopeless. Septicæmia was present, resulting in purulent inflammation of the pleuræ, pericardium, and mesentery. Enteritis was also present, and the lungs, liver, and spleen were congested. With regard to the Redrump, I doubt if anything could be done in the direction you name, i.e., anything rational. It will come all right in time with patience; we must expect troubles of this sort with all the cold and damp weather that is so prevalent. Please do not put pepper on the bodies you send; it is of not the slightest use in preventing decomposition, although I believe it is popularly supposed to be.

CANARIES. (Mr. W . . . . .). These two birds, though not belonging to a member of the F. B. C., present a point of so much interest that I mention them. The first I examined seemed to have little or nothing the matter with it as far as the naked eye appearances went, except that the spleen was a trifle enlarged, a condition that is met with under several circumstances. *On bacteriological examination however I found it to have died of septic fever*, and to present, in some respects, an even more typical condition under the microscope than did the other bird, which to the naked eye shewed all the familiar signs of this disease (in addition to having all the microscopical ones). On referring to the owner's letter I found that a fortnight previously he had bought 45 birds from one breeder and that they were all dying with the usnal regularity found when septicæmia of this type attacks a stock.

Such a case as this shews us very plainly how futile and misleading a course it is to attempt to decide by guesswork whether any given bird has died of infectious disease or otherwise. Even where the organs of a dead body look very bad to the naked eye, this may only be due to the action, after death, of the *B. proteus vulgaris*, and it is therefore quite possible that such a case may not even have been one of disease at all, but of starvation or accident.

AVADAVAT, cock. (Mr. Fillmer). This bird, which was old and anæmic, appeared to have had some broncho-pneumonia in both lungs. The bareness of the skin was part of the general condition of feebleness and not due to any special skin affection.

ROCK SPARROW, hen. (Dr. Hopkinson). There was no brain extravasation. The fits were due to a posterior basal meningitis. With the history of its having been the third or fourth case of the kind recently in your aviary I looked for the meningo-coccus of Weichselbaum but was unsuccessful.

GOLD WAXBILL, cock. (Mr. Fillmer). As with the Avadavat broncho-pneumonia was the cause of death. The right lung only was affected.

AVADAVAT, hen. (Dr. Greene). This was not a case of tuberculosis, but of what has so often been mistaken for this disease. The granulomata with which the liver and spleen were filled were due to acute septicæmia.

WAXBILL, cock. (Miss Brooksbank). Catarrhal pneumonia of the right lung was the cause of death.

ROSY PARRAKEET, cock. (Miss Baker). The Conures had a great hand in this business. Your bird was perfectly healthy, the cause of death being concussion of brain.

BENGALI, hen. (Miss Brooksbank). Egg-binding and rupture of a blood vessel in the oviduct.

ROCK SPARROW, hen. (Dr. Hopkinson). This bird, unlike the other, had no brain lesion, but died of the too common septic enteritis. There were no filariæ in the blood: the fits would be reflex from the intestinal trouble. (*Vide rules.*)

TOUCAN. (Mrs. Pond). This magnificent bird died of general septicæmia after being as you say ill for only four days, I note that on the first day of his being poorly you gave him some hard-boiled egg. Even supposing a bird can manage to eat this with impunity when he is in absolutely good health, it will certainly be injurious to him if he is unwell. I am afraid you did not read the Story of Bird-death in last month's number very carefully.

INDIAN PITTAS. (Mr. Heselton). Neither of these birds was in a condition to afford any definite information as to the cause of death. The one I examined was a young male, and had possibly died of septic enteritis. The other was too offensive to be opened. *Vide* the latter part of my remarks above under the heading of "Canaries."

MEALY REDPOLL, cock. (Mr. A. W. Watson). This was an old bird, and was probably the fattest I have ever seen. Beyond some congestion of the liver, which was not enlarged, all the organs contained in the trunk were healthy. The brain and diploe of the skull presented numerous punctate ecchymoses. Cause of death—cerebral hæmorrhage.

GOULDIAN FINCH, hen. (Mr. J. W. Tidey). Acute enteritis of septic origin was the cause of death. The organs generally were very anæmic, and the case was one shewing how a bird in poor health can speedily fall a victim to the septic organism and its toxins.

W. GEO. CRESWELL.

Correspondence.

BLUE-WINGED LOVE-BIRDS.

SIR,—My pair nested this summer and have one young one, now flying about with the other birds. It is, I imagine, a hen, as there is no blue in its plumage.

I have an outdoor aviary with a nesting room, but (like the Budgerigars) they preferred the roof, where they can be quite undisturbed. There is a space between the roof and some ornamental timber through which they creep. Therefore I could not see the nest, and do not know how many eggs were laid. (Mrs.) HULTON.

BREEDING EXPERIENCES.

SIR,—I should be much interested to know what luck our members have had in breeding in outdoor aviaries this year.

My experience has been disappointing, as I lost two nests of *ruficauda* and *acuticauda* finches through the storms, beside the hen bird of the former and a hen Gouldian. Zebra finches did well in a cocoa-nut husk.

I congratulate you on the improvement in BIRD NOTES. Dr. Creswell's "Story of Bird-death" should be reprinted separately when finished: it is invaluable to all bird keepers.

A. BULLOCK-WEBSTER.

BALDNESS IN AVADAVATS.

SIR,—Dr. Greene, in his "Favourite Foreign Birds," says: "One great drawback these little birds have, namely, they are very apt to become bald and otherwise featherless, and when this happens I have never known the plumage reproduced."

My own limited experience coincides, so far, with the above, that I have found them to become bald in a short time, but think this is caused by the plucking propensities of other species.

About two months ago a little cock Avadavat, who was kept in a small aviary cage with other Waxbills, had become absolutely clear of feathers on head and neck, presenting a comical resemblance to a minute Vulture; after being isolated, he is completely restored and in splendid colour.

It would be interesting to the undersigned to know if this is the experience of others. ALFRED WHEELER.

The baldness is sometimes caused by the plucking of other birds, but more often it is not so caused. When not caused by plucking it is sometimes thought to be the result of skin disease, but it is very often simply a symptom of debility. The feathers frequently come on at the next moult.

HORATIO R. FILLMER.

Foreign Bird Queries and Replies.

BIRDS FOR AVIARY.

Question: I am thinking of building a small outdoor aviary (about 5ft. by 8ft., by 9ft. high), It would be well protected, being sheltered at the back by a thick hedge, and on each side by the ends of two Pheasant houses (which would form its sides). It would be boarded on all sides except the front, facing South.

I wish to keep small birds in it for breeding, and shall be greatly obliged if you will give me suggestions as to how many pairs I could keep in it, and also the most likely pairs to breed successfully. E. W. C.

Answer: If I were you, as you wish the birds to breed, I should not put more than two or three pairs of birds into such a small aviary. The easiest species to breed are, I think, the Zebra Finch, the Ribbon Finch, and the Parson Finch—but they are all rather disposed to interfere with the nests of other birds. Perhaps the best way would be to make serious attempt to breed only one species each season, and start next May with one pair of either of the species named above, and fill up the aviary with a few small inoffensive birds, such as Waxbills, Silverbills, and the smaller Mannikins. But I should not put more than a dozen birds into the aviary—though some people would consider it large enough for forty.

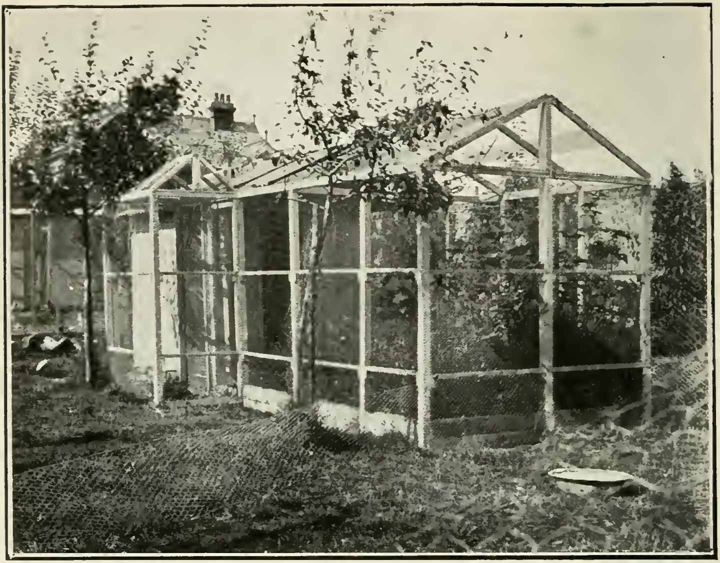
By "small birds," I take it that you mean small foreign finches—but if Parrakeets are admissible, there are no birds so easy to breed as Budgerigars. H. R. F.

EGG FOOD—OR A SUBSTITUTE?

Question : What does Dr. W. G. Creswell propose as a substitute for yolk of egg? I always give my birds in the aviary, Britishers and foreigners, one yolk or half a yolk of a fresh egg every day, mixed with potato and ants' eggs and biscuit. I have had two or three Canaries die, and their bodies seem very swollen, but I have lost no foreign birds, and the diet seems to suit all. In cold weather I always give a larger allowance of egg, and I considered it was owing to this strong food that the birds did so well in the cold dark nights, as they have no heat nor artificial light. I always thought that the Canaries died from over eating on the rich food, but they never died suddenly, and all are well now. M. C. H.

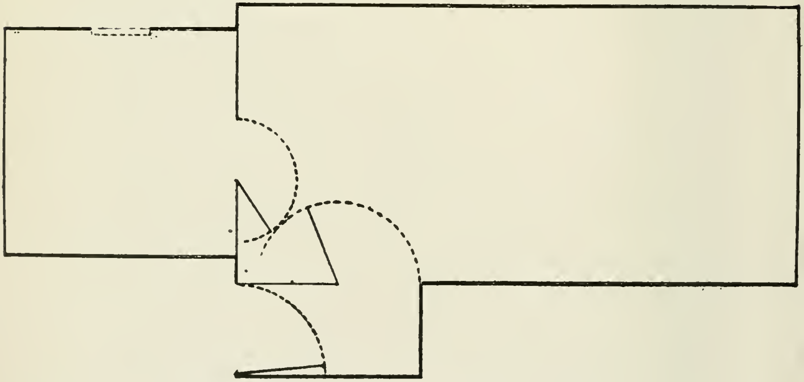
Answer : No substitute for the egg is required. Ants' eggs and dried flies are quite sufficient. Mr. Frank Finn tells me that the Chinese, who, as he says, know practically all that there is to be known respecting the keeping of cage birds, never give egg even to insectivorous birds. All the latter ever have consists of millet, with the husk removed, and dried flies, both these substances being given perfectly dry.

Here is yet another practical commentary on what I say about egg food, and also on what I have repeatedly laid down to private enquirers as to the fallacy of hard food being indigestible *merely through its hardness or dryness.* This fallacy owes its origin to those who talk freely about digestion and assimilation without knowing anything of the complex chemical processes represented by those words. W. G. C.



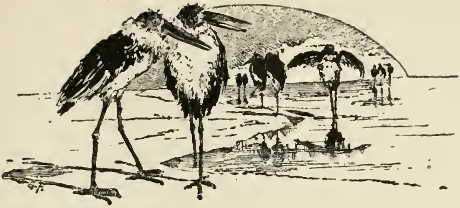
H. R. FILLMER'S AVIARY.

From a Photograph by Dr. C. S. Simpson.



Ground Plan of H. R. FILLMER'S AVIARY.

Scale:—quarter of an inch to a foot.



My Outdoor Aviary.

By H. R. Fillmer.

My aviary is a very unpretentious building—and I am far from holding it forth as a model. My purpose in writing an account of it is chiefly to induce the owners of more ambitious aviaries to follow my example, and give the readers of *Bird Notes* particulars of the houses in which they keep their birds. At the same time, I think the details of the building of my aviary may be useful to those who think of erecting similar structures.

In my garden there is a grass-run for poultry, enclosed with wire netting, and measuring about 50 ft. from north to south and about 30 ft. from east to west. This run, and in fact the whole garden, lies on a gentle slope towards the south, and is well protected on the north and east by walls. There are a few standard fruit trees in this run, and in the middle was an old wooden fowl house, of flimsy construction, and this was used as the nucleus of the aviary. My young gardener first made a concrete floor to the fowl-house, which strengthened the whole structure, and raised the floor-level several inches above that of the surrounding ground. He then nailed battens on to the outside of the house, and over these covered the sides with match-boarding $\frac{3}{4}$ inch in thickness, thus double-boarding it. The wooden roof was first felted with roofing felt, and then covered with corrugated iron sheets. The window was enlarged, and covered with fine wire netting inside the glass.

Against the south end of this house my man built a timber frame-work, covered with wire netting (½ in. mesh). This is roofed in for about one-third of its length (at the end nearest the house) with corrugated iron. The house is provided with a door in two heights, opening into the run—in severe weather the lower, and larger, part of the door can be closed. The upper part of the door is now securely fastened back against the wall by iron hooks. At first it was only tied back by string, which broke during the severe storm in September and allowed the door to slam to—thus causing the death of some of the birds, which were shut off from their food, all of which is kept in the inner aviary.

On the west side of the run is a wired enclosure forming a sort of entrance lobby to the aviary—the double doors are important, to prevent the escape of birds. Even with these double doors I believe one bird *did* escape this summer—for it disappeared from the aviary, and I feel convinced that there is no hole through which it could have squeezed.

The greater part of the outer aviary is turfed, but the part nearest the house, under the iron roof, is sanded. There are about a dozen young trees along the east side of the aviary—sycamore, alder, and birch. The floor of the inner aviary is covered with fine peat litter. The seed-vessels are all on a small shelf, which hangs from wires under the ridge of the roof, in the house. There are a few pea-boughs for perches, but the trees render these scarcely necessary in the outer aviary. Nest-boxes are hung on the wall in the house.

It is difficult to get a good view of the aviary from a camera, because of the trees in the garden, but

Dr. Simpson's photograph is as good an one as it is possible to obtain. Some of the uprights look out of plumb in the photograph—and no doubt they are not perfectly true, for they were amateur work—but the defect certainly seems exaggerated, and would, I think, never be noticed when looking at the aviary, though very apparent in the photograph. I consider that the aviary is a very creditable piece of work for one not trained as a carpenter.

In this aviary I have kept, for the last six months, some twenty small foreign seed-eaters—and they have not injured the trees nor the grass. According to some popular writers on aviculture, one square foot of floor space should be allowed to each bird—at which rate my aviary would accommodate ninety-seven. I am convinced that it is a great mistake to put so many birds into a small aviary, and the result must be the destruction of all trees and turf, to say nothing of more serious evils.

My success in breeding in the aviary has so far been small, the season's results being only two broods of Bicheno's Finches, the first consisting of four nestlings and the second of one only. The Long-tailed Grassfinches built a beautiful spherical nest, in which they slept each night for several weeks, until the continuous rains in August washed it to pieces—but no eggs were ever laid. A hen Silverbill laid and sat, but died in the nest during the terrible cold spell in June. A solitary hen Aurora Finch has sat industriously but fruitlessly on one or two batches of eggs—whether her own unfertile production or the neglected laying of other birds I do not know.

The above was written early in November—since then I have brought most of the birds indoors, but a few are still out, and appear none the worse for the cold.

Wading Birds.

By J. Lewis Bonhote, M.A.

The birds of the shore have always had a great fascination for me, for in their beauty of shape and proportions many of them are unsurpassed throughout the whole bird world, and, from their habit of spending most of their time on the ground, they make most suitable inhabitants of an aviary, and may be safely kept with the most delicate of the Passeres.

The Waders, or Limicolæ, are essentially inhabitants of saltings or marshes, and consequently but seldom seen except by those who live near the sea or some tidal river: but though spending most of their time on or near the shore they retire inland, and in the case of a large number of species to the limitless tundra of the arctic regions, to breed.

Almost every variation of form and habit is to be met with among these birds, and within the limit of this short article I can only hope to touch very briefly on some of the principal forms.

The Green Plover, Lapwing, or Peewit will probably be the most familiar to my readers. This bird, which is with us all the year, inhabits low-lying marshes and meadows, congregating during the winter in enormous flocks often numbering many thousands; as spring comes on, however, the majority of these birds leave us for their breeding quarters, but many are still left to rear their young in our meadows.

I once had the privilege of watching two birds in my aviaries pairing up; the cock erecting his crest to its greatest extent and squatting on the ground, would wheel round in a circle on his breast, picking up at the same time blades of grass which he would throw over his back, while his hen kept running round and admiring him. In one of these so-called 'scrapes' in the ground, lined with a few bents, the hen lays her four pear-shaped eggs, all lying with their points inwards so as to occupy a minimum of space. After some twenty-four days the young chick hatches, and from the first is well covered with down and able to run, and in the course of two or three days to feed itself.

While the incubation period is going on, the parents, if their nesting ground be invaded, make off, the cock flying high in the air and tumbling like a Pigeon, while he makes at the same time a great noise and covers the retreat of the hen, who flies slowly and silently away near the ground. As soon as the young are hatched both sexes, when disturbed, remain and fly round the intruder, trying with their piteous cries to beguile him from the vicinity of their young, who, in obedience to those cries, lie absolutely motionless, squatting close to the ground.

Another well known Wader is the Golden Plover, which nests on the dry moors of Scotland and the North of England. Slightly smaller than the Green Plover and lacking his contrasting colours, it is nevertheless a beautiful bird, especially in summer, with a mottled yellow back and black underparts edged with pure white. He is not so familiar during the nesting season, and does not indulge in the antics of his southern brother, but calls the hen from the nest with a shrill pipe consisting of one note, and the two birds will then continue this mournful monosyllabic language, escorting you perhaps for half a mile and eventually passing you on to the next pair with similar results.

Another form of Wader is the Stone Curlew, or Norfolk Plover, which lays two eggs on the bare sand or downs, often miles from water, to which it will repair at night. This species is only a summer visitor with us, and somewhat local. It utters a very loud and weird call, especially by night.

A common inhabitant, during the summer, of our streams and lakes is the Common Sandpiper, which cannot fail to attract attention as, on being disturbed, it flits with peculiarly graceful flight down the stream just ahead of you, and, if it be watched when settled on the shore, one may notice the peculiar light and graceful motion which it imparts to its whole body, swinging the head and tail up and down alternately.

Nearly allied to this species are the Wood and Green Sandpipers, almost indistinguishable from each other, which only visit us on passage when going to and from their northern breeding haunts. The Green Sandpiper differs, however, from its congener, and all the rest of the order, by laying its eggs in the old and disused nest of a Fieldfare or Redwing.

In the North of Scotland may be found another peculiar little Wader — the Red-necked Phalarope. This little bird is the most aquatic of all the Waders, and spends much of its time swimming on the water like a Duck, for which style of life it has been modified in having lobed feet and its feathers being close, thick, and impervious to water, while even its beak shows a tendency to become flattened. In this species the hen is the brighter bird and does all the courting, while on the duller coloured cock devolves all the housekeeping duties.

The Ruff, once so common on the marshes of East Anglia, is a species in which the male, on the approach of spring, dons a plumage of many colours, and so variable is it that no two males can be found exactly alike. The males, at that time of the year, congregate at certain spots, morning and evening, and show off before the females, also sparring among themselves, but this last is more of the nature of a sham fight: "the show's the thing," and the females walking about find themselves surrounded by would-be wooers kneeling down before them, and showing off their full beauty.

One might go on for pages pointing out the great variety of forms and plumages to be found within this group, such as the Curlew, with its weird cry and long curved bill, or the noisy Oyster Catcher with its red and chisel-shaped beak; the Avocet with its recurved bill; the Stilt, with its long and awkward legs: one and all modified to suit their particular environment, but for want of space I must pass over them for the present with the mere mention of the Snipe. In this species the bill is greatly lengthened to facilitate its searching the deep mud for its sustenance, and at the extreme tip of which is placed a sense organ of extreme delicacy with which it may find its unseen prey. The nest is situated in suitable marshy places throughout our Islands, and during the nesting season it makes a curious "drumming" sound, produced by the rapid vibration of its tail or wings through the air.

It now remains for me to give a few hints as to how these birds may best be kept in captivity.

Several of the larger kinds, such as the Curlew and Oyster Catcher, should not be kept with the small birds, but any species up to the size of a Peewit can be kept among smaller birds with safety.

They are somewhat difficult birds to procure; a certain number of Ruffs and Godwits come over yearly, from Holland, generally in the spring, and those species that breed with us are best obtained by rearing them from the nest. For this purpose it is of no use taking them too young: they should be about three weeks old, and then they will freely feed from the first on earthworms and insects, and can then be meated off without difficulty.

The aviary in which they should be kept is preferably a "lean-to," facing south, as these birds are somewhat susceptible to cold, especially in the form of the long-continued damp with driving wind, so characteristic of our winters; but as long as part of the aviary is covered over it will not matter if the rest is open.

The ground should be of dry gravel, and if possible a small portion may be turfed. A couple of boards a foot or six inches off the ground, and covered with short straw, or peat moss litter, will be found an advantage in cold weather, though not essential to their well-being.

As to food, the staple diet of mine is Game Meal, but in addition they are given bread and milk, hard-boiled egg, scraped raw meat, or any of the foods used for soft bills.

Under these conditions many species of this order will thrive, and from their graceful shape and the variety and change in their plumage will form a most interesting addition to an aviary.

They can be allowed full use of their wings as they very soon learn the limits of their cages and do not, as a rule, attempt to escape.

Their greatest enemies are rats, to whom they seem to form an appetising morsel, and I know of no birds so persistently set upon by these pestilential marauders.

When first purchased these birds will often be found to have one wing clipped, and if the bird is in good health it will be advisable to pull the feathers of that wing as soon as possible, or otherwise it is almost certain to be weak and possibly sicken at the next moult.

Needless to say they are not suitable for the show bench, but to those who have small outdoor aviaries they are well worth the little trouble they require, forming a beautiful addition to any collection, and being a constant source of pleasure to any bird lover.

The Story of Bird-Death.

By W. Geo. Creswell, M.D. Durh., L.R.C.P., F.Z.S.

(Continued from page 207).

Bearing in mind the enormous death-rate from septic poisoning which obtains in the case of both indigenous and foreign wild birds when they are first exposed to those conditions which are inseparable from the methods by which they are caught, kept, and fed—a rate which would be even more startling to us if only the dealers would take us into their confidence and tell us their experiences—we shall see that, when we approach our Canaries, we are mounting several steps higher towards immunity, though even here we are still a long way from its complete realization. My readers may at first sight think I am mistaken in this, and that I have forgotten the mortality that steadily takes place every breeding season among the young birds, and, though perhaps to a less degree, also among their parents. But in spite of the knowledge of all this, and while quite cognizant of the ravages made from time to time by sudden epidemics of the most virulent form of the disease—epidemics which in a very few weeks often depopulate whole birdrooms and aviaries—I say there can be no manner of doubt on the subject. Vital statistics, as we all know, do not depend for their accuracy upon the individual records of one village or even of one county, and so we must make a mental picture of the enormous number of Canaries that are bred all over the country and imported into it every year. We are told that Norwich alone has no fewer than four thousand breeders, and we know that in addition to other parts of our island where whole districts are apparently given up to the hobby, there is scarcely anywhere the smallest hamlet in which the breeding cage is not kept in use by one or more of the inhabitants. We can thus form some idea of the incredible numbers that are bred, and when we add to these the thousands of crates of more or less indifferent German cocks (and hens) that are collectively sold by our dealers, the sum total must be staggering. Now it follows that a uniformly heavy death-rate such as that obtaining among captured birds, would by reason of its being so generally diffused among our bird-keepers, be a matter of public and general knowledge, and in the face of all the trouble and expense involved in the pursuit of the Canary hobby, would speedily put an end to it except among the well-to-do and leisured classes, whereas, as is well known, it flourishes chiefly among the masses. My own experience, my enquiries within the range of my fairly large circle of acquaintances, and the information I have gleaned in the course of my pathological investigations, lead me to make an approximate estimate of about twenty per cent. per annum as the average rate of mortality at all ages among these birds. Compared with the human rate in this country, which is from year to year about seventeen per thousand, this rate of ours is heavy enough in all conscience; yet if it is viewed side by side with the eighty or ninety per cent. of the newly caught wild birds, it conclusively points to a progressive immunization on the part of our little yellow friends.

Descending from the general to the particular, let me here give an instance of this comparative immunity. In the summer of 1901 I bought a very fine example of the Plumbeous Finch (*Spermophila plumbea*). He was evidently of a good type of "disease resister," for he had been on our side of the water for only a month or six weeks and was in full song within half-an-hour of his delivery to me by the railway people. One of my outside aviaries, where of course he got no egg food, was then his home till the June of 1902, when an idea struck me that as he was so strong and lusty here was a good opportunity for me to try a new departure in the way of hybrid breeding. So a small hen Canary was picked out from among my lot, and together with the Finch transferred to a breeding cage indoors. At that time I myself was not altogether emancipated from the thraldom of tradition and superstitious beliefs, and therefore with the usual pretty idea of "building up" my prospective breeders —(this always looks so alluring on paper)—I gave them the regulation egg food in the regulation quantities. The non-immunized wild bird from being active, salacious, and full of song, almost immediately became mopey, thickened, and dull, and was dead in a fortnight from acute enteritis accompanied with diarrhœa and fits. The Canary, belonging to a partially immunized race, survived and, I believe, is still alive as I write these lines. She, it will be seen, was a counterpart of the Englishman belonging to a race partly immunized against tuberculosis.

The explanation of this comparative immunity of the Canary is also to be found in the natural law already alluded to, viz. that it is conferred by long contact with the disease on the part of the race, combined as a consequence with ruthless and persistent elimination thereby of the most unfit individuals of that race. Exactly how long the Canary has been domesticated is impossible to say. I have searched all the oldest literature we have on the subject, with the result of finding the earliest allusion to it in 1556.* But in these early days it seems to have been long enough domesticated to have already shown distinct and more or less fixed variations of plumage through the agency of artificial selection. In 1713 there were no fewer than twenty-nine distinct varieties, including one that must have required very many generations to produce—the crested bird. If, therefore, we say that the Canary has been domesticated for the last five hundred years we shall more than probably be much within the mark; and since we have definite proof that two hundred years ago egg was always being given to *breeding* birds, and that judging from various indications in the literature of the day it was even then being given in deference to old traditions, it is fair to assume that the Canary has been exposed for at least four or five hundred generations to the influence, not only of the septic bacillus as found in the ordinary way in cage life, but also of that virulent form which is generated at the high temperature of a bird's body in the favouring nidus of egg food. So it is quite easy to see why it survives under those ordinary conditions which render the fate of the newly-caught wild bird an almost certain death, and why even with egg food its death rate is still much less than that of the other bird is without it.

Continuing the argument, we shall also realize that although our breeders of Canaries annually lose great numbers of birds, both old and young, from septic enteritis, and moreover succeed in setting up now and then dangerous and fatal epidemics by giving the favourite egg, yet it must be also conceded that by so, causing these fatalities they are actually slowly tending to ultimately bring about a condition of complete or nearly complete immunity from septicæmia on the part of their birds, exactly in the same way as we have seen that the negro has attained to it in connection with yellow fever. But this complete immunity will not be arrived at yet; in matters pertaining to evolution "a thousand years are but a day," as witness the relationship that even now exists between septicæmia and our domesticated fowls and pigeons. Nevertheless, the Canary has progressed a considerable portion of his journey towards the ultimate goal, and this fact alone would point to the date of his first domestication being one of considerable antiquity, though not sufficiently far back for him to find a place in the stone literature, or even in the papyri, alongside of the gallinaceæ and columbidæ.

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* Buffon, *Hist. Nat. des Oiseaux*, Tome IV., page 26, and *Histoire des Incas* Tome II., page 239.

For the purpose of throwing a side light on this process of attaining immunity, let us here consider the relative positions of the Grey Parrot and some other members of the order Psittaci as they exist to-day. The former bird would probably breed freely enough in this country if we took sufficient pains to encourage it; but in view of its great strength, its destructive proclivities, the difficulty of putting up true pairs with any degree of certainty, and the necessity for a good deal of room for each pair, we prefer to obtain our solitary house companions by means of the purchase of specimens brought in from their natural wild life and habitat. Result? Well, I have it on the authority of Dr. T. W. Greene that *by one dealer alone there are imported eighty thousand per annum, besides those that come over under the auspices of the numerous other importers.* How many of these birds find their ultimate resting place in kitchen and parlour? Ask the dealer how many he burns—ask the buyers how many they bury, and then we shall understand why there is not one of these naturally long-lived birds in every house in the country, as there would be if every bullet found its billet. Tens of thousands are caught; thousands just manage to scrape through the quick steam passage (in the old wind jamming days only the very strongest arrived in England, the rest died on the way); and of these thousands, hundreds carry their septicæmia just long enough to get out of the dealers' shops into the private house, and a week after that there are left alive only tens, comprising in part those that have recovered from the disease and in part those that have by their own innate resistive power repelled it altogether.

The Budgerigar, Cockateel, and Redrump have also gone through all this, and indeed are still going through it, but the survivors, being small and altogether more amenable to family life in large cage or small aviary, have been adopted by us as breeding birds, with the result that they have made a beginning, and a well-marked one too, towards the attaining of immunity against the ubiquitous pest of captive bird life. That their death rate is not more than it is is greatly due to the fact that so far it has not been thought necessary to teach them to cultivate a taste for egg food, although the stupid fad for giving them *soaked* bread* when breeding is responsible for a good deal of the mortality that occurs among the breeding birds and their young. Another reason for septicæmia appearing among these birds more frequently than it otherwise would do is that breeders (to "infuse fresh blood") occasionally seek to reinforce their stock by throwing in some freshly imported birds, fondly thinking that thereby they are doing themselves some wonderful good, whereas by this manœuvre they are only taking a backward step or two, and so for a time neutralising those they have already taken towards the desired end. But while breeders are themselves being individually penalised through the agency of the septic bacilli which are cultivated in the saucer of soaked bread given to their "half-hardy" stock, and through that of those bacilli which are also from time to time imported into their aviaries from the dealer's foci of infection, along with the mistakenly supposed "hardy" wild specimens, these (domesticated) Parrakeets, &c. by the very fact of continuing their respective species in a septic environment, have already begun to establish themselves as a family undergoing the process of immunization. It therefore becomes a matter of personal choice to each breeder whether he protects himself and his pocket by preserving his birds, as far as possible, from specially septic influences, or whether in a fine phrensy of altruism he elects to do his infinitesimally small share towards the production of a racial and hereditary immunity, to be realised by posterity some hundreds of years hence, by wilfully losing a large proportion of his own birds every year. There is no parallel to guide him between the present and the past; for although we of to-day benefit to a certain extent in the case of our Canaries through the methods of our ancestors, it must not be forgotten that what they did was the product, not of benevolent foresight, but of sheer ignorance. And we must moreover remember that if we do elect to actively help towards the ultimate immunization of any family or species of bird, it can only be in the case of those birds that can be persuaded to habitually breed generation after generation in our aviaries. To wilfully help the already too destructive septic organisms to play havoc with those birds that we either cannot or will not breed in captivity, is only to persist in wasting our money, and in killing to no purpose uncountable multitudes of one of the most beautiful forms of the creations of Nature.

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* *If* bread is *necessary* for young birds it should be given to the parents in the dry state, and it will be sufficiently moistened by them before being given to the young. When it is moistened beforehand it only serves as a breeding ground and nursery while in the saucer for the septic bacillus, and so sets up disease.

(To be continued).

"Bird Intimacies."

THE Rector of Woolstone, Mr. Gilbert Coventry, has just told me of a wild Rock-Dove, which one of his stable-boys had reared from the nest. It slept in the open, however, and had full liberty. Soon the grand things on the Rector's table attracted it, and it would appear through the open window at mealtimes, take hot soup with much zest, and even sip sherry from the wineglass. At night it often slipped in and slept in the Rector's bed, on its back, under the coverlet!

One Sunday morning during the reading of the lesson the Dove flew swiftly through an open window into the church and settled on the Rector's head. Broad smiles spread over the faces of the elders, and audible titters came from the youngsters. A gentle touch sent the bird down to the edge of the clerk's desk below, where it sat undisturbed. This clerk is now officiating in that church for the seventy-fourth year. He was only sixteen when first appointed, and is now ninety years of age, still hale and strong, and one not likely to be upset by so slight a matter as a perching Dove. He is one of four brothers, all still living, the youngest being seventy-three years old. Another of them is also a village clerk. I grieve to say that the Dove has lately died from over-eating and drinking.

A Laughing Dove of Barbary which was given to a sister of Mr. Coventry lived in her town house for twenty-eight years. It was "of age" when she first got it, and it has been with another sister at Duffield Park now over two years, living in a sunny room, having a blind old Canary as companion. It will not suffer another Dove to be in the same room, but is a friendly, beautiful creature, full of cooings and laughter if its friends enter the room.

When talking of these Doves to Lady Farren of Bealings House, Suffolk, a few days ago, she told me that her family had had remarkable intimacies with wild birds. A pair of Swallows, for instance, had built their nest, a few years ago, in her bedroom on the top of a large picture frame. A cloth was hung over the picture to preserve it. First the birds made a little ridge of bird masonry along the edge of the frame, and behind this the nest was placed. From first to last all was kept scrupulously neat and clean. All untidy bits and the mutings were carried away through the windows in the beak of one of the parents. Before the family were ready for flight a little silver band was fixed round a bird's leg. The following year Swallows again came and built in that bedroom, but not the marked one. The third year this bird returned, however, with a mate, and was warmly welcomed. The children declare that he is a perfect little gentleman, helping his mate in every department of family life. They and the nest have been photographed by Mr. Richard Kearton, and the birds' doings have been chronicled by one of Lady Farren's little girls in a nature-book, which took the prize in its class at the recent nature study exhibition. J. A. O."

The above appeared in the *Pall Mall Gazette* of Nov. 28, 1903, and is so interesting as to deserve preservation in our pages. I make no doubt but that such instances of deviation on the part of birds from their ancestral habit of fear of man could be multiplied. I myself have met with a case. A Canary which some years ago belonged to Dr. H. C. Rogers of Birmingham, used to live on the most pronounced terms of personal intimacy with his master and mistress, and scarcely ever made any use of his cage, which was always open, save as a restaurant, whither he could occasionally repair during the intervals between the family meals. At these he was always present, and I have repeatedly seen him actually perch on the fork and dispute over the possession of a morsel of food as it was about to disappear in his master's mouth, elevating and flapping his wings and chattering in no uncertain spirit. In many other ways he would show his complete friendship for man, or as we ought perhaps to regard it, his complete disregard of him as a possible enemy. But the climax as I thought was reached on an occasion when I was attending Mrs. Rogers during a serious illness. When the patient took to her bed the bird and his cage were brought up into the room that he might not be lonely. Here of course he was soon at home, and from hopping about on the pillow he soon learnt the way to creep down into the bed, where he actually spent nearly the whole of each day couched close to his mistress's side. So fearless was he that when it was necessary for me to examine the patient's chest I had to really drive him away, only to frequently return in a few minutes, and often before I had said farewell.

W. Geo. Creswell.

Reviews.

"*Parrakeets, being a practical Handbook to those species kept in Captivity,*" *by David Seth-Smith, F.Z.S., M.B.O.U. London: R. H. Porter, 7, Princes St., Cavendish Square, W.*

Part 5 appeared in June, and Part 6 (which concludes the work) in October. These parts contain excellent coloured plates of the Barnard's, Bauer's, Yellow-fronted Blue-bonnet, Red-vented Blue-bonnet, Golden-shouldered, Many-coloured, Turquoisine, Splendid, Antipodes Island, and Golden-crowned Parrakeets, and the Varied Lorikeet. Most of them are from drawings by Mr. Goodchild. Some species which have been recently imported for the first time are dealt with in an appendix—the aim of the work being "to treat of every species comprised under the title that has ever been imported alive into Great Britain."

We fully agree with the author's remarks about aviary-bred Budgerigars,—

> "It has often been stated that aviary-bred Budgerigars "are inferior to imported birds, but I think this statement is "often far from true. There is no doubt whatever that "birds bred in artificially-heated rooms during the winter "months are far from robust, and most likely to be affected "by excessive loss of feathers—'French moult'—but I can "positively affirm that Budgerigars that have been bred "during the summer months in large outdoor aviaries in "England, providing of course that in-breeding has not "been permitted, are just as fine and healthy birds as any "that were ever seen in Australia; in fact, I would go "further and say that one breeder has, to my knowledge, by "carefully selecting his breeding stock, produced birds that "are considerably finer than any imported birds."

Mr. Seth-Smith found the Varied Lorikeet "very shy and nervous and not nearly so active or interesting as any other Lorikeets" he had kept. He describes the Lineolated Parrakeets as "extremely quiet and gentle little birds."

The work is the most complete and satisfactory treatise which has ever been published in English, dealing with any group of birds from the avicultural standpoint. It is an absolute necessity for every lover of Parrakeets. We hope that the author will see his way to deal with other groups in a similar style.

"*Bird Life in Wild Wales,*" *by J. A. Walpole-Bond. Illustrated with photographs by Oliver G. Pike. T. Fisher Unwin. Seven shillings and six pence.*

Popular interest in natural history steadily increases—and the frequent appearance of works like the above is evidently a response to a growing demand.

This is a chatty, discursive book, from which a good deal of ornithological knowledge can be gleaned concerning our native species. It is a very good example of its class, and the illustrations, which are mostly photographs of nests, are of a high degree of merit.

The following extract will give an idea of the style of the book :—

> "Another very characteristic bird of these fast flowing rivers and streams is the charming Grey Wagtail, and few prettier sights are presented to the naturalist than a family party of these birds. Long after the young leave their homes the old birds are very solicitous for their welfare, flying backwards and forwards past the intruder with shrill notes of alarm. This Wagtail is generally, we think, double brooded, the first clutch of eggs usually being laid early in May, the second some five or six weeks later. Often enough we have seen the nest at no great distance from that of the Dipper. The nest is in this locality generally built on a ledge of rock bordering a stream, or in a crevice or hole in the stonework of a bridge; indeed, you will seldom find it far from water, though we know of one case where it was built in ivy covering the wall of a stable yard with no stream at all near.
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> "The eggs, numbering four to six, vary a good deal both in

colour and the distribution of their markings, One variety is so closely mottled as to hide all traces of ground colouring; another has well-defined blotches and speckles. The ground colour, where it can be seen, is of a creamy white, the spots and blotches brownish yellow of various shades. During the winter months this species leaves its summer haunts, migrating further south, and may then be seen in small parties in most of our southern and midland counties feeding at the horseponds or pools in the rickyards in company with the Pied Wagtail. Occasionally, but *very* occasionally, a pair stop in one of these haunts for the summer. The only other bird likely to be confused with this species in the Blue-headed Wagtail, but this bird is an extremely rare migrant to our shores, and is a frequenter of pasture land rather than rockbound streams. In summer, however, the male Grey Wagtail may always be distinguished from it by the black patch on the throat, and, as above remarked, the blue-headed species is absent from our island in the winter. We may just say that the female Grey Wagtail has no black throat-patch, and in winter the cock loses his."

POST MORTEM REPORTS.

(*Vide Rules*).

SULPHUR SEED-EATER, cock. (Miss Brooksbank). The immediate cause of death was pneumonia of limited extent: the remote cause was a chronic blood disease (leucocythæmia), characterized by a disproportion of white to red blood cells and causing a condition of disease in the spleen. This appears to be a rather commoner disease in birds than in man.

CANARY. (Miss Nicholson). This bird was suffering from a general septicæmia, the lungs being pneumonic, the liver congested, the intestines and mesentery inflamed, and the spleen enlarged. The swelling in the frontal region of the head was composed of effused and broken down blood in which were present very numerous septic organisms. In fact it was the commencement of what is so often erroneously called "a tuberculous nodule." The blood-vessels of the brain were much engorged, the grey matter presenting a pink appearance.

WOOD PIGEON. (Mr. Pycraft). The internal organs of this bird were useless for examination. This was due to length of time that had intervened since death, to extraneous sepsis having followed the track of the shot, and to the original disease having been septicæmia, as disclosed by the swellings on the feet. These were metastatic deposits consisting of dense masses of Koch's and Davaine's bacilli and were examples of the erroneously so-called "tuberculosis," as in the Black Cock previously sent to me. This same condition is found in domestic pigeons though not usually in the same site.

ZEBRA FINCH, cock. (Mr. Fillmer). This bird died of double pneumonia. It is probable that the Canary you speak of died of the same disease, the symptoms pointing in that direction.

TICKED CANARY, hen. (Mr. Tweed). This bird died of septic pneumonia; there was a large area of grey infiltration in both lungs; bacilli were present in other organs.

SILVER-BILL, cock. (Mr. Dart). Catarrhal pneumonia of the right lung was the cause of death.

GREY PARROT. Will the member who sent this kindly refer to the conditons on which the post mortems are done? I much regret to say that one of the first three was not complied with, and that the bird and letter were therefore destroyed without examination. There is a reason for these conditions being laid down, and I shall feel obliged if members will, before sending birds, remember the notice—"*Vide Rules.*"

BROWN-THROATED CARDINAL, hen. (Mr. Fillmer). This was a good example of subacute septicæmia running on to the formation of a large caseous mass, (involving the structures of the neck in this instance). No treatment would have been of any avail.

ZOSTEROPS JAPONICA, cock. (Mr. Fillmer). Septicæmia was here the cause of death. The bird had been ill long enough for the lungs and pleuræ to become affected in addition to the intestines, liver, and spleen.

MELODIOUS JAY-THRUSH, cock. (Mr. Desprez). Septic enteritis was the cause of death. The "struggling" was due to convulsions which frequently occur in this disease. With dog-biscuits the crissel was *de trop:* the cod liver oil and the sulphate of iron were useless.

Gouldian Finch, hen. (Lady Dunleath). Acute yellow atrophy of the liver was the cause of death. The true causation of this disease is not fully understood.

Variegated Canary, hen. (Mr. Tweed). Enteritis was here the cause of death, It was of a chronic nature, and was due to the action of septic organisms.

Canary. I regret that this bird (received Nov. 26) was not examined, as the member sending it had not complied with one of the first three conditions laid down for my post mortem examinations. Will members also when possible kindly give the particulars as to the birds' ailments etc. in the order specified in Rule 4?

Baltimore Oriole. (Mr. Porteous). Virulent septicæmia was the cause of death, nearly every organ in the body being affected.

Grey Parrot, hen. (Mr. Hollins). This bird died of septic inflammation of the lungs.

Zebra Finch, hen. (Mr. Dart). Acute broncho-pneumonia was the cause of death.

W. Geo. Creswell.

Correspondence.

BREEDING EXPERIENCES.

Sir,—I have been, in spite of the bad summer, very fortunate in the success I have had in breeding in my outdoor aviary.

My Cordon Bleus built in August in a bush and hatched four young ones. They were unlucky with their first nest, as heavy rains one night drowned all the young ones. Their second nest they built in September—it was made of fine grass and hung on to fern fronds, and was more sheltered than the other, and they successfully reared two young ones.

My Saffron-finches reared ten young ones from four nests, and the old pairs are again sitting.

My pair of Orange-cheeked Waxbills brought out three or four young ones. which are all in full plumage.

The common African Waxbills built a nest like a round ball of grass, on the ground, and reared three young ones. It was almost impossible to find the opening in the nest.

A pair of Golden-breasted Waxbills built in a husk and lined their nest most brilliantly with cock Golden Pheasant's feathers. The little cock and hen sat together on the nest and one or the other I noticed always peeping out. They have reared three young ones and the young cocks' plumage is nearly, if not quite, as bright as the old one's.

A pair of Red-headed Gouldian Finches built in a box cage hanging to a branch, and hatched two young ones, but, alas! just as they were beginning to feather, a Parrakeet slipped into the aviary, pulled out both, and killed them. I was bitterly disappointed, but hope for better luck next year. The young ones had a little *bright* blue bead on each side of their beaks.

I may mention that these birds are all together in an outdoor aviary with 120 others, and were out all last winter. I never give any egg food, only millet (large and small), canary seed, home-made bread (a quarter of a loaf for them to peck at) soaked in cold water, plenty of green food, also oranges and apples, and some sponge cake soaked in cream. The Parrakeets are next door in a division by themselves, and other mischievous birds, such as Weavers, Parsons, Cardinals, Nonpareils, etc., etc., in another division. The only birds I have taken in for the winter are a Green Bulbul, a pair of Scarlet Tanagers, two Cordon Bleus, and the Gouldians. The others have a large lamp lighted in the cottage at 3.30, which burns all night, and in very cold weather a small paraffin stove is lighted, but I have not used it this winter. I hope this account may interest some of your readers.

N. L. F. DUNLEATH.
(President of the Foreign Bird Club.)

SEPTIC FEVER.

SIR,—We have all been having an intellectual treat lately from your up-to-date magazine on the above subject.

Dr. Clarke solved the bird plague mystery some years ago, and now Dr. Creswell, in his "Story of Bird-Death," is confirming, by his studies, Dr. Clarke's pathological discoveries. But there is one thing still undiscovered that we fanciers sadly want: that is a cure for this fever. I would have given a good sum for a cure about 10 years or more ago, when, after years of careful pairing and rearing Norwich Canaries, I had got my birds to the correct type and show condition of excellence, this awful malady cleared me out of about 30 valuable birds in less than a month. I shall never forget the suddenness of the attack, nor the speed with which it did its deadly work.

It happened in this way,—I bought two birds from a Canary hawker for, I think, 6/- (the pretty cage made of cane induced me to purchase), and I took them out of this cage and put them into a cage in my breeding room (poor innocent man that I was!) On the second day one of these birds died, and on the fourth day the other one. After that, my hitherto healthy birds began to droop. This was in the month of August, when the young had all left their nests and were in flight cages, so I let them all loose, thinking that a good amount of exercise might assist them to recover; but all was in vain, and, as they sickened one by one, I caged them and put them in another room, only to have the pain of seeing them gasping for breath and struggling with this deadly disease until it had done its foul work. About thirty of my birds succumbed and a few survived, but the constitutions of the latter were utterly ruined.

Now, by the self-sacrificing work of the gentlemen mentioned, we understand all about the disease, but we fanciers are waiting for a simple cure, so that we may grapple with it in its first stages and save our birds.

Someone may say that prevention is better than cure, and suggest giving up the use of egg food: but by giving up egg I fear we should lose more birds still, and where would you get so good a food for young Canaries? This is a question, Sir, I should like BIRD NOTES to take up. Has any one tried stale sponge cake slightly moistened with scalded milk? Stale sponge cake can be purchased cheaply.

ARTHUR JONES.

[By the time the end of "The Story of Bird Death" is reached, our correspondent will find his questions answered.—ED.]

Foreign Bird Queries and Replies.

All queries are answered by post. A few which appear to be of general interest are published, with the answers, in this Magazine.

COCKATEELS.

Question I have just bought a pair of Cockateels, newly imported birds, which I have turned into a large indoor aviary with some Budgerigars. The cock bird seems fairly healthy, but the hen is a little puffy and seems to breath rather heavily.

I feed on canary, millet, and oats. I have put in a little soaked bread and a sponge cake.

What had I better give? Would it be well to catch her and put her in a small cage and keep her in a warm room for a few days and feed her on soft food only? Are ants' eggs any good? Or would you leave them in the aviary (14ft. by 6ft by 6ft.)?

I have not kept Cockateels before, so hardly know what to do. A. S.

Answer: If the Cockateel has caught a chill, the only treatment likely to be of any avail is *warmth*. Therefore it would be well to do as you suggest and keep her for a time in a cage in a warm room. Except, perhaps, when they have young, Cockateels do not require anything but seed and green food, and I should advise you to give this bird nothing but plain canary seed, spray or "Indian" millet, and plenty of fresh groundsel, free from rain or dew. If, however, she seems thin, a little hemp may do good. Some crushed egg-shell might be advantageous. H. R. F.

ALEXANDRINES.

Question: Will you please tell me, through BIRD NOTES, what a "Rock Parrot" is, and what is the difference between a "Rock Parrot" advertised at 10/- and an Indian Ring-necked Parrot at about 4/-. E. B.

Answer: There are three or four species commonly sold as "Rock Parrots" or "Alexandrine Parrakeets," and the differences between them are very slight. The species most commonly imported is, according to Mr. Seth-Smith, *Palæornis nepalensis*. The Indian Ring-necked Parrakeet is *Palæornis torquata*, and is a considerably smaller bird than any of the Alexandrines. The smaller, and cheaper, bird is generally to be preferred as a pet—but it is usually impossible to break any Ring-neck, whatever the species, of the habit of screaming. Still, individuals differ greatly, and some do not scream *very* much! H. R. F.

MOULTING OF SHAMAH.

Question : My Shamah, which began its moult in June last, with its head and breast, and which has been gradually moulting ever since, (there are still two old feathers in its tail, and it has certainly not lost all its wing feathers), has begun to moult over again. Last week it lost its two longest new tail feathers, and now its breast is moulting for the second time, and the new feathers are coming. Is not this strange? and not right? and do you think it will injure the bird? and what am I to do? R. H. W.

Answer : It certainly is not normal that your Shamah should moult twice within a few months—but our climate affects foreign birds in various strange ways, and we have had a very peculiar season. There is no reason why the bird should be injured, if it is well taken care of during the moult, and you can keep it sufficiently warm. I do not think any *special* treatment is possible or desirable. All insectivorous birds should have more live insect food than usual, while moulting, and be protected from cold. H. R. F.

BUDGERIGARS AND RATS.

Question : Can you explain why I should get 26 young cock birds from one pair of Budgerigars? This has been my experience this season. I did not get a single hen.

I am sorry to say that I have rats in my aviary, and have lost birds to the value of 60/-. This is the second invasion I have had, and I am nearly disheartened. Could you give me any advice on this trouble, through your very useful *Bird Notes.* A. R. B.

Answer : I cannot suggest any explanation of the young Budgerigars being all cocks. The question of the determination of sex is at present very imperfectly understood.

I should suggest the keeping of a good ratting terrier near the aviary—the blocking of the runs with concrete—and the employment of traps (so arranged as not to entrap the birds). But possibly some of our readers, who have been successful in combating rats, may be able to offer more detailed and practical advice. H. R. F.

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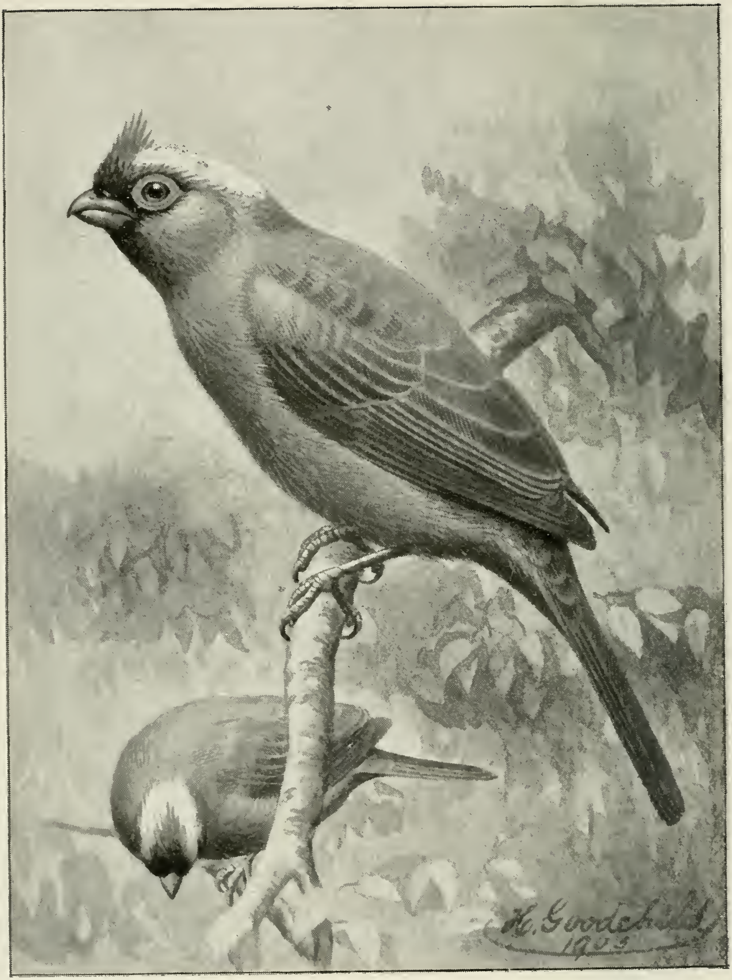
H. Goodchild
1903

THE WHITE-CAPPED TANAGER.

(*Stephanophorus leucocephalus*).

From a living bird in the possession of Mr. J. A. Swan.

To face page 253.

The White-capped Tanager.

(*Stephanophorus leucocephalus*).

By J. A. Swan.

The task of writing an article on a species which has not hitherto been treated of from an avicultural standpoint is apt to weigh somewhat heavily upon the author. One realises that one has to portray, to the best of one's ability, the characteristics and idiosyncrasies of a bird which is a complete stranger to the large majority of aviculturists, and while this necessarily carries with it a certain freedom from criticism, it also carries an added sense of responsibility.

The White-capped Tanager has indeed been but meagrely described even by ornithologists, and before I proceed to deal with the avicultural side of the subject, I propose to place before my readers the results of Natural History or Ornithological researches. That great standard work, the British Museum Catalogue of Birds, Vol. XI. page 143, gives us the following particulars of the bird :—

> "Black with a strong bluish tinge, especially on the "rump and sides of the head; lesser wing-coverts blue; "back of head silky white, with a small crimson vertical crest "in front of it; forehead, lores, and chin black; feathers of "forehead short and erect; bill brownish black, below "paler; feet brown: whole length 7 inches, wing 4, tail 3·3.

> "*Female* similar, but not quite so bright in colour; and red
> "in crest barely apparent.
>
> "*Hab.* Southern Brazil, Paraguay, Uruguay, and N. of
> "Argentine Republic."

Professor Lydekker, F.R.S., in "The Royal Natural History," writing in a less dryly scientific strain, tells us:

> "One of the loveliest of the family is the White-capped
> "Tanager, a summer visitor to Argentina, where, says Mr.
> "W. H. Hudson, 'it makes its appearance in the spring in
> "the woods bordering on the Plata River, and is usually
> "seen singly or in pairs. The nest is built in a tree ten or
> "twelve feet from the ground, and is somewhat shallow, and
> "lined with soft dry grass. The female lays four eggs, white
> "and spotted with red. During incubation the male sits
> "concealed in the thick foliage close by, amusing itself by
> "the hour with singing, its performance consisting of chat-
> "tering disconnected notes, uttered in so low a tone as to
> "make one fancy that the bird is merely trying to recall some
> "melody it has forgotten, or endeavouring to construct a new
> "one by jerking out a variety of sounds at random. The
> "bird never gets beyond this unsatisfactory stage, however,
> "and must be admired for its exquisite beauty alone.' Azara
> "named this species the 'Blue White-Headed Beautiful.'
> "and the term was justified, for the entire plumage of both
> "sexes is a lovely deep corn-flower blue, surmounted by a
> "cap of silvery-white feathers; a crimson spot ornamenting
> "the forehead, looking like a drop of blood."

This practically completes the general knowledge of the bird, though Gould also refers to it as inhabiting the mountainous districts of Brazil.

A comparison between these extracts and the clever drawing by Mr. Goodchild, will easily enable my readers to form a very good idea of the distribution of colours in the bird. Its unique appearance and great attraction lies, no doubt, in the oblong patch of silky white feathers which cover the crown—from which it is also called the White-crowned Tanager—and the short bright red feathers immediately in front of the white, which the bird can raise or depress at will. I have noticed that when alarmed, or in the presence of strangers, these red feathers are always raised to a vertical position; but, when at rest, or with those with whom the bird is familiar, they are invariably laid close to the crown, and in this position are comparatively inconspicuous.

My knowledge and ownership of the bird dates back to a certain Lord Mayor's Show Day over two years ago. Animated with a desire to evade the crowd which fills the City on these occasions, I betook myself for a stroll Eastwards, and in due course arrived at Mrs. Abrahams' shop in St. George's Street. I had thought of buying a Superb Tanager, but the bird I had mentally chosen had been sold, and in the course of a look round a "very rare" bird was pointed out to me. It was rather late in the afternoon, and the light being not very good, the bird was caught for my inspection. I was immediately struck by the altogether uncommon appearance of the bird, and the more I gazed at it the stronger the impression grew, that here, at all events, was something quite out of the ordinary run of birds. There was an air of boldness and individuality, expressed in every turn of the body and poise of the head, which quite captured my fancy. On ascertaining the price, I must confess my ardour instantly cooled, only to revive again within a few seconds with renewed strength. How weak most of us are in the presence of a rare and beautiful bird! We arrived home safely together, and thus began a companionship which soon grew into a strong feeling of affection and regard. On being placed in a large flight cage, my little friend—though he is rather large when compared with some of the "little" ones—immediately made himself at home. The only trace of shyness noticed was his unwillingness to let anyone observe him eating the insectivorous food. He did not mind my watching him attack a banana or other fruit, but he seemed to feel it derogatory to his dignity to be seen eating—and enjoying—artificial food! He grew out of this, however, in time, but not before I had taken advantage of his weakness and played a few tricks on him. I would pretend to go out of the room, leaving him demurely sitting on a perch, and after staying outside a few moments, I would just creep back again, and invariably caught him at the food bowl. Sometimes he would go on eating most heartily, without being aware of my presence, until I made an audible move, when he would hop up to a perch in a second, and wear a most injured expression for some time afterwards.

(*To be continued*).

The Story of Bird-Death.

By W. Geo. Creswell, M.D. Durh., L.R.C.P., F.Z.S.

(Continued from page 240).

By this time we shall be able to understand the true inwardness of something we often hear about — the so-called hardiness of Canary Hybrids. In the first place, breeders of these birds are unanimous in saying that while in the nest their expectation of life is only a narrow one; it is however a matter of common opinion, at any rate among non-exhibitors, that if they live long enough to get about they are to be then regarded as robust and long lived. The mortality among them as nestlings is of course accounted for in as many ways as there are breeders to speak about it. The weather was hot, or it was cold; perhaps wet, perhaps too dry; watercress was here the sinner, there the hemp; yet another nest was killed by groundsel, or perchance the mother sat too close and sweated them, and so on throughout the whole gamut of idle speculation based on what is so unhappily called experience. As opposed to this "experience" microscopical observation has revealed that practically the whole of the mortality among nestlings is the result of the poison thrown out by septic organisms acting upon the delicate tissues of these immature bodies. We should therefore be smart enough to recognize that where the effect is so constant, the cause, or rather its carrier, should be sought for in the shape of something equally constant. Slavish adherence to tradition however has so blinded us that the one substance common to us all in our breeding capacity, and therefore the most likely to be the common carrier of the trouble, has all along been staring us in the face, and yet we have been unable to see it. We have each of us preferred to cast the blame on some different circumstance and to exalt our own "experience" as the "one and only Jones." It is quite obvious to the average understanding that we cannot all of us have been right, and yet since each disputant's argument of "experience" is *prima facie* as good as any of the others', it would according to this seem after all that none of us have been wrong, which to say the least is curious. But seeing, even without the evidence afforded by constructive experiments, that by the processes of comparison and of eliminating one by one all our old presumed causes, we have not succeeded in the slightest degree in reducing the infantile death rate from septicæmia, we now begin to realize that all of us must have been wrong, and that it is the still universal egg food that is the most frequent carrier and the most invigorating medium for our ubiquitous enemy.

To resume:—having by so many illogical reasons accounted for the inordinate infantile death rate of their hybrids, and having at the end of the breeding and moulting seasons comfortably dismissed it from their minds, our breeders now shift their grounds of argument and account for the assumed robustness and longevity of the mule on the score of the delicate Canary parentage having been re-inforced by the hardy wild blood. Now let us see how far this holds good. I have alluded to the well known fact that while in the nest they are actually more prone to death than young pure bred Canaries, so that we see that they are after all not so hardy as Canaries of the same age, though they are being brought up under the same conditions. Where then does the prepotence of their wild parentage come in? Why, in precisely a contrary direction to the one alleged: the non-immunized wild bird bequeaths to his half bred son a less power of resistance against the highly specialized bacteria propagated in egg than is possessed by the young of the partially immunized pure bred and domesticated Canary, so that any degree of hardiness the mule may possess is derived after all from the Canary side of the family and not from the wild finch. Again if the mule owes such hardiness as he has to his father, why is not the nestling hybrid between two wild birds (but brought up in a cage under Canaries) still more hardy, seeing that it comes of a feral stock on both sides? So far from this being the case we all know that it is even more difficult to rear than is the hybrid which has the Canary for one parent, and for the same reasons, viz. that its wild parentage is, of all things connected with it, that which is least calculated to preserve it from the effects of organisms bred in that state of concentration and virulence which is inseparable from either cage or aviary, and which moreover is always being heightened, as though it were not already bad enough, by the fostering encouragement afforded by egg food.

Returning to our Canary hybrid:—let us further enquire how facts bear upon it. I have it on the authority of more than one well known gentleman who is specially qualified to inform me of the truth, that in the case of hybrids intended for exhibition, and therefore fed upon colour feed, the great difficulty is to get them through the first moult. Now in my case and in that of others who do not exhibit and who consequently do not colour feed, there is nothing like this difficulty. Not that I am saying that none at all ever die; a certain percentage of birds must die under any circumstances, wherever they are kept and whatever they are fed on. But so few die that one cannot but be struck by the difference in this respect between these birds and the colour fed ones.

These gentlemen tell me moreover that the life of a show hybrid when it does survive its first moult is not a very long one, and that it averages only three or four years. Now if we ask the first hundred fanciers we meet what is the reason of this it is all Lombard Street to a China orange that half of them will say that it is the knocking about the country that kills the birds, and that the other half will be equally sure that it is the colour feed that is at fault. It is quite possible that the travelling, involving as it does a certain amount of nervous shock, want of sleep, and rapid transitions of temperature (though, as will be elsewhere seen, this latter is the least harmful of the three) may be responsible for *some* of the mischief; but since I have as yet seen nothing in the course of my *post mortem* examinations to lead me to think that the colouring agent itself has any deleterious effect, and since the great majority of these hybrids die of the same septic troubles as are so commonly associated with egg feeding, it is only rational to connect the unnatural shortness of life met with in these show birds with the egg that is used as the excipient of the colouring matter.

It may be advanced against my argument that the pure bred show Canary, also colour fed, has a somewhat longer lease of life than the hybrid, although being used for breeding it has in addition egg food all through the spring and summer. (The influence against longevity that is ascribed by fanciers to the breeding itself may be dismissed as a minus quantity.) Of course we see that this advantage is due to the progress made towards immunity on the part of the Canary, as previously pointed out, and to the fact that the hybrid can never be as immune as the Canary by reason of the legacy of susceptibility bequeathed by its feral ancestors. Were the travelling and the colouring agent alone the causes of death—and here there is no question of comparative immunity—then the mortality of the show Canary would be on a par with that of the hybrid, and if the fact of breeding made for shortness of life, then that, coming as it does on the top of the former, would serve to turn the scale and actually shorten the life of the Canary, as compared with that of his half bred son.

Now that we have watched the exhibition mule being sacrificed at an early age, partly to satisfy the senseless dictates of fashion, and partly to do honour to the Juggernaut of tradition, let us see what happens to his happier brother that is kept only for song. Having survived the dietetic dangers to which he was so freely exposed during the period of his early infancy, and being probably "only a Sparrow" as to looks, his owner finds a purchaser for him at about three half-crowns in the person of some unsophisticated soul whose only idea of bird keeping is that it will be pleasant to have a songster in the house. It is true that some such birds as this, through being kept close up to the ceiling to be poisoned by mephitic vapours or else just above the sash joint of a draughty window to be killed by bronchitis, can only manage to struggle on for a comparatively short time, but on the other hand it is no uncommon thing to find others that have lived happily for many years in one house, dying at last of sheer old age and natural decay. But these have had no egg since they left their breeder's bird room. If we go to this gentleman and ask him why such an extraordinary age should have been attained to we shall quickly get the answer that mules live long because they do not breed. This dictum, as by this time we are not surprised to find on examination, is based on nothing better than our old friends, tradition and so called "experience." Buffon and his prototypes, Hervieux and others, noticed the fact that males of both the Canary and other finches lived several years longer when kept for singing only than when they were allowed to breed; and as befitted writers of those days of rashly speculative philosophy garnished by almost complete absence of exact scientific knowledge, they immediately jumped to the conclusion that this great difference in longevity had its basis in the gratification or otherwise of the sexual faculty. They, like those who have come later, were quite ignorant of the connection between egg food and death, and so overlooked the facts that being kept in solitary confinement for song only meant a healthy diet of seed alone, and that the sexual life of the breeding birds, which had really nothing to do with their mortality, was accompanied by the egg food which we find from their writings was then only given to them while breeding, and which we now see had so much to do with it. The sexual life in birds is in the natural order of things: as the season approaches it is duly provided for by, relatively to other animals, an enormous increase in the size and physiological activity of the male organs; and this is found on dissection to be as strongly marked in the hybrid as in the pure species. Governed as it is by purely physiological conditions and wants, absolutely free of any promptings to unhealthy limits by unhealthy mental conditions, and entirely uncomplicated by those destructive concomitants which so often involve and surround the human subject in this connection, the gratification of the sexual instinct on the part of birds, when thus liberally provided for at special seasons of the year, cannot seriously be regarded by any one who approaches the subject in the capacity of either physician or student of natural science as intended by Nature to involve a penal limitation ; it would therefore seem that so far from solitary confinement being an improvement upon natural laws and being a factor that makes for health, it is at the very best but an element of neutral influence in either the case of a pure bred bird or even in that of a hybrid—in whom be it borne in mind, both the instinct and the power for sexual congress are equally strong with those of his pure bred relatives.

Just as Buffon's Canaries and mules kept for singing only, lived long,* not because they were deprived of female society but because they were not fed on the inevitable egg that even then was always placed alongside the breeding hen, so our Canary hybrid owes his extra span of life when kept merely as a house companion, not to the fact that he is probably incapable of procreation, but to the fact that like them he too is not treated to egg. That he does live long under such conditions is a fact which can easily be verified by my medical readers, or indeed by any whose routine work leads them daily into many houses. Such observers will constantly come across solitary songsters—both Canaries and other finches and their hybrids—in the houses of people who happily know nothing of the arbitrary laws laid down by the experts as to their feeding. On enquiry they will invariably find the food consists of some advertised mixture containing all those seeds which are declared to be Anathema, and that the egg which is supposed to be so necessary to well being is always absent. On further enquiry they will find that a bird of three or four years of age is considered young, and that one of fourteen or fifteen years is not very uncommon, *i.e.* in those houses where in addition to rational feeding the questions of due ventilation and undue draughtiness are properly considered.

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* Mais il y a une observation constante qui porte sur les uns et sur les autres, c'est que, plus ils travaillent à la propagation et plus ils abrègent leur vie. Un serin mâle éléve seul et sans communication avec une femelle vivra communément treize ou quatorze ans ; un métis provenant du chardonneret, traité de méme, vit dix-huit et méme dix-neuf ans. Un métis provenant du tarin, et également privé de femelles, vivra quinze ou seize ans. Buffon, *Hist. Nat. des Oiseaux*, *Tome 4me.*

(To be continued).

Review of the Club's Foreign Bird Show, Crystal Palace, Dec. 8, 9, & 10, 1903.

The first Show held by the Foreign Bird Club may certainly be considered a success, even if the actual number of entries and the financial result do not quite realise the hopes and expectations which were formed. The Club was doubly fortunate in being able to count upon the experience and co-operation of the London Cage Bird Association and in sharing the magnificent site they had secured at the Crystal Palace. All the world knows the Central Transept, and it was there the birds were staged, and here let it be remarked that a better place could not have been selected. The Exhibition was shut off from the North and South Naves by immense curtains falling in folds sixty feet from the roof, which effectually precluded any possibility of a "through" draught. The Orchestra and the Royal boxes comprised the East and West ends respectively, the base of the former being prettily decorated with palms, ferns, and other subtropical plants, whilst groups of statutory scattered amongst them greatly enhanced the artistic effect Palms and ferns were also very effectively displayed amongst the cages, giving the Exhibition a decidedly attractive appearance.

The light during the day was perfect, and was greatly appreciated by Members and visitors. The immense heating apparatus at the Palace, running into miles of hot water pipes, kept the Exhibition at a very agreeable temperature, so no bird suffered on account of the cold. During the evening, great electric arc lamps, supplemented by gas where necessary, gave the best possible artificial light.

The actual number of entries in the section reached 195, which is a great advance on any Foreign Bird Classes of recent years. We were extremely pleased to see that all classes had been allowed to stand, with but one exception, and as that was one of the Selling Classes, the loss was not a great one. The average entry was a fraction over thirteen per class, a good response, but not quite a "paying" one. The Parrots and their kindred totalled 44 in four classes, a quantity we hope to see largely exceeded at the next Show. The Dove Class contained eleven entries —which was fairly good—but only three exhibits appeared—which was very bad! Seed-eaters amounted to 69 in four Classes—Class 147 alone containing 25, which is probably the largest number of foreign birds in one class for some time. Perhaps next year this section might be extended, and it would then probably attract more entries, as Seed-eaters are far more generally kept by aviculturists than either Parrots or Insectivorous birds. Softbills numbered 44 in three classes, and were certainly the pick of the Section for variety and beauty. The Rare Feathered and Hybrid Class unfortunately only contained three entries: this had been looked forward to as the most interesting class in the Show, and in letting it stand with such a small response the Show Committee must have considered it in this light. The Selling and Cage Classes completed the Section and are commented on later.

The judging was performed by two of our best known present day judges, and the third—Mr. Fillmer—certainly has the confidence of foreign bird keepers in his ability to discharge this by no means easy function.

When the Exhibition was opened at two o'clock on the first day everything was a model of neatness The prize cards were all up—in the Foreign Bird Section at all events—and the birds were quite "at home" and prepared to receive their visitors and friends. The following notes on the various sections are supplied by a well known Member of the Club.

THE PARROT CLASSES.

There was nothing exceptionally new in these Classes, I thought—though some of the birds were exceedingly interesting and the quality throughout of a high class. Mr. Camps had done his work with evident care, and though I differed from his awards in one or two instances it was in comparatively minor cases.

Class 140. *Twelve entries.* (*Budgerigars and all species of Lovebirds and Hanging Parrots*). First and Special, No. 201, Mrs. Anningson, with a wonderful pair of Peach-faced Love-birds, certainly the best birds in the Class and deserved to win. Second, another pair of Mrs. Anningson's Love-birds—quite equal to winning when their companions are absent. Third, Mrs. Chas. Cooper, nice Love-bird in good condition. Fourth, Messrs. Driver and Hunt, pair of Yellow Budgerigars, good birds, but poorly shewn. I should have put them behind the next exhibit on this account. V.H.C., Mr. Osbaldeston, perfect pair of Budgerigars. H.C., Mrs. Anningson, another pretty Love-bird—evidently these are a favourite with this lady. C., Mr. Thornes' Budgerigars.

Class 141. *Seventeen entries. All species of Parrakeets (other than Budgerigars) and Lorikeets.* First, and Specials Nos. 202 and 218, Mr. Hawkins's beautiful pair of Varied Lorikeets—splendidly shown and deserving all their honours. I thought they hardly looked quite so bright as in October last. Second, Mr. Osbaldeston, with a magnificent pair of Kings, grand birds indeed. Third, and Specials 202 and 212. Miss Castang's Pale-headed Parrakeet, very nice bird and in beautiful condition. Fourth, and Special 213, Mr. Osbaldeston's Redrump Parrakeet, a fine bird, but could not have been put higher. An extra 4th was awarded to the same exhibitor's Crimson-wing Parrakeet — this I should have given to Miss Rosa Little's Rock Parrot, which received V.H.C., though I confess there was little to choose between them. V.H.C., Mr. S. M. Townsend, Orange-flanked Parrakeet, quite a Lilliputian amongst the others, but in perfect condition. This mite also had the impudence to win Special 214. Is this the Tig Timothy of Vol. I, page 13. I wonder?* H.C., and Special 215, Mr. Nicholson, with another Crimson-wing in good condition. C., and Special 216, Mr. Hawkins's Tui Parrakeet, and C., Messrs. Thwaites and Lloyd, Barnard Parrakeet, both in fine plumage. Indeed, condition was essential to win here, and the competition was keen even then, otherwise Mr. Hamlyn's Red-collared Lorikeet would have been amongst the winners. It was hard luck on an otherwise rare and beautiful bird. Amongst the other noticeable exhibits were Messrs. Thwaites and Lloyd's Rock Pepler, winner of Special No. 217, and Mrs. Anningson's pair of White-eared Conures, though the latter were not well shown. There was also another King, a Blue Mountain, and a Malabar Parrakeet. Altogether a very fine class and one of which I thought very highly.

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* Mr. Townsend told us that it *was* Tig Timothy.—Ed.

Class 142. 10 *Entries. Grey Parrots and all species of Amazons.* 1st, and Special 205, Mrs. Hector's well known pair of Greys: splendid condition as usual, and deserved to win. 2nd. and Special 211, Mr. A. Jones, fine Grey, stated to be a hen. 3rd, Mr. Osbaldeston, very nice Green-cheeked Amazon: might have had second prize. 4th, Mr. Osbaldeston, a Yellow-naped Amazon—another good bird and in fine condition. V. H. C., Mrs. Cooper, Blue-fronted Amazon. H.C., Mrs. Howes, another Blue-fronted. Mrs. Stacy-Marks, yet another of the same species. There were three other Amazons in the class, and it may be interesting to notice that the two Greys took the highest awards.

Class 143. 7 *Entries. All species of Short-tailed Parrots not comprised in the above, Cockatoos, Macaws, and Lories.* 1st, and Specials 193 and 210, Dr. Lister's Black Cockatoo. Unique exhibit, but not in the best condition. 2nd, Mr. Osbaldeston, Blue and Buff Macaw —splendid bird in beautiful colour and looking well. 3rd, Miss Collier, Senegal, a nice bird certainly, but I should have put it behind 4th, Mrs. Cooper's fine Macaw, which was in tighter feather than second Macaw, but not so bright in colour. V.H.C., Mr. Osbaldeston, Eclectus. An Illiger's Macaw and a Cockatoo were cardless—owing to poor condition, no doubt.

THE DOVE CLASS.

Class 144. 11 *Entries. All species of Doves and Quails.* Had all the entries competed, this would no doubt have been a very interesting class. Unfortunately however only three competitors appeared, and of these one cannot speak highly. The Judge only awarded one prize, a 4th, to Mr. Housden's pair of Wonga Wongas, and it was quite as much as they deserved, for they were very wild and badly shewn. There was also an Indian Green-winged Dove, blind in one eye, and a pair of Zebra Doves.

SMALL SEEDEATER CLASSES.

There was a very nice collection of birds in these classes, and I spent a very enjoyable time with them. The quality throughout was good (though there were but few actual rarities), and the staging, in nearly every instance, was particularly effective. Mr. Fillmer must have had a good deal of difficulty in selecting the prize winners, but I think his awards gave general satisfaction, as I heard no adverse comments. This must be very satisfactory to the Show Committee, who, I understand, had to bring great pressure to bear on Mr. Fillmer to induce him to officiate.

Class 125. 14 *Entries. All species of Whydahs, Weavers, and Combasous.* 1st, Dr. Hopkinson, Weaver, which I took to be one of the *Hyphantornis* out of colour, perfect condition, quiet and well shewn. 2nd, Mr. H. E. Fortlage, Paradise Whydah in full colour, and with splendid tail: also very steady and shewn to perfection. Must have been quite a toss-up for the winner out of these two. 3rd, Mr. J. Dewhurst, a Weaver, in colour and good condition, but rather wild. 4th, Mr. Harper, Indian Great Weaver Bird, out of colour. I believe Mr. Harper claims this to be one out of about only 20 of the species at present discovered. V.H.C., Mr. Cushny, Bishop in nice colour and condition. H.C., Mr. Lampier, Combasou. C., Mr. Dewhurst, Weaver. There was a nice Crimson-crowned Weaver in colour, which might have had a card, and also two or three other Weavers which completed this class. Three absentees.

Class 146. 16 *Entries. Common and Green Avadavats, St. Helena, Grey, Orange-cheeked, and Golden-breasted (or Zebra) Waxbills; Parson, Diamond, Ribbon & Zebra Finches, Silverbills, Spice Birds, Grey & White Java Sparrows, Black-headed, White-headed, & Bronze Mannikins, and Bengalese.* 1st, Mr. Franz, a perfect pair of White Java Sparrows. (Not a dark feather in them, for I hear the Judges had them out to see !) Quickly sold at a sovereign. Second, Mr. Hawkins' pretty little pair of Zebra Waxbills. Third, Mr. Jenner, pair of St. Helena Waxbills, fine condition. Fourth, Mr. W. B. Frostick, neat little Zebra Finches, aviary bred. V.H.C., Mr. Swan, beautiful pair of Avadavats in full colour. H.C., Mr. Townsend, handsome little Golden-breasted Waxbills, and looking well. H.C., Mr. Hawkins's Diamond Finch, nice bird, but the competition was too strong for a single specimen. H.C., Messrs. Thwaites and Lloyd, well known pair of Parson Finches, not quite perfect, otherwise they must have been among the prize winners. C., Mr. Townsend, good pair of Bronze Mannikins. There were also another Diamond Finch and an Indian Silverbill, and one or two absentees. A Golden Sparrow was very properly wrong-classed.

Class 147. 25 *Entries. All species of Waxbills, Grassfinches, and Mannikins not comprised in the above.* 1st, and Special 210, Mr. Hawkins's rare Vinaceous Fire-finch, perfect condition. 2nd, Mr. Hawkins's Spotted Fire-finch, another rare bird, ranked equal to the winner I thought. 3rd, Mr. Osbaldeston's pretty Crimson Finch. 4th, and Special 223, Mr. Hawkins's pair of Black-rumped Finches, decidedly uncommon and deserved their position, indeed I rather think I should have put them before the Crimson Finch. Extra 4th, Mr. Townsend's charming little Lavender

Finches, quite deserved the extra prize. V.H.C., Mr. Osbaldeston's pair of Magpie Mannikins, well shown, and Mr. Franz's Australian Fire-finch (Special 224) which appeared to be the hen of the Vinaceous Finch. H.C. (Special 225) Mrs. Anningson's nice pair of Rufous-tailed Finches. Mr. Woodhouse, another pair of the same species. Mr. Hawkins, yet another pair of Ruficauda—all as like as peas; and Mr. Osbaldeston with a rather poor coloured pair of Pin-tailed Nonpareils, and a pair of Parrot Finches which were not quite up to the mark—these seem to be rather scarce just now. C. (and Special 226) Mrs. Cooper's pretty Gouldians; Mr. Franz's pair of handsome Masked Grassfinches; Mrs. Anningson and Mr. Townsend further pairs of the same birds; Mr. Swan an interesting pair of Dwarf Finches, not often seen; and Mr. Hawkins a cock Gouldian Finch, a splendid bird, and might have been a little higher up. The other exhibits included Red-faced Finches, Cordon Bleus, and another pair each of Ruficauda and Gouldian Finches. A Nonpareil had to be wrong-classed, as it should have been entered in Class 148. This Class struck me as being very varied and interesting, and no doubt caused the Judge a considerable amount of trouble. The winners were well chosen, however.

Class 148. 14 *Entries. All species of Grosbeaks, True Finches and Buntings.* 1st, Mr. Osbaldeston, very nice little pair of Olive Cuban Finches in splendid condition and well shown. 2nd, and Special 221, Messrs. Thwaites and Lloyd, Indian Crested Bunting, a sombre but very interesting bird, which quite deserved its position. 3rd, and Special 221, Mr. W. B. Frostick, a perfect pair of Desert Trumpeter Bullfinches. 4th, Dr. Hopkinson, one of the Foreign Sparrows—not an attractive looking bird by any means. V.H.C., Messrs. Thwaites and Lloyd, nice Cardinal. H.C., Mr. Osbaldeston, Reddish Finch. C. Mrs. Anningson, handsome Virginian Cardinal. There were also a nice pair of White-throated Finches, a Cape Canary, three more Cardinals and a Sparrow in this Class. One of the Cardinals, by the way, was shown in a little all wire fancy Canary cage, with hardly enough room to turn round in. I hope it is not its home!

THE INSECTIVOROUS CLASSES.

Class 149. 19 *Entries. All species of Tanagers, Sugar Birds, Sun Birds, and Zosterops.* A very interesting class indeed, certainly the best in the Section, although nothing new or startling appeared. 1st, and Special 228, Mr. Theobald's fine Magpie Tanager, showing the effects of exhibiting and somewhat over shown. A cage half the size and of a different pattern would have been ample. Nevertheless, a very interesting bird, the dove-tailing of the glossy greenish-black breast feathers into the white being most noticeable and unique. The tail also differs from those of other Tanagers in being longer and with overlapping feathers. 2nd, and Specials 192, 203, 207, and 229, Mr. Townsend's beautiful Gold and Green Tanager, a splendid creature, in perfect condition and well shown. The bird fully deserved all its Special Prizes, and was certainly equal to the Magpie Tanager. They ought to have been bracketed first. By the way, the wings, which *were* undoubtedly green, appear to be changing into blue. I think the latter is probably the adult plumage. 3rd, and Special 230, Mr. Townsend's perfect Tri-colour Tanager, another very interesting bird, splendidly marked. Extra 3rd, Mr. Hawkins, cock Blue Sugar Bird, nice condition and in full colour, but not quite perfect. 4th, Mr. Swan's stately looking White-capped Tanager, a charming bird. V.H.C., Mr. Goodall's smart little pair of Zosterops, very lively and looking well. H.C., and Special 233, Mr. Osbaldeston's Blue and Black Tanager, a pretty bird and well shown. C., and Special 234, Mr. Townsend, Silver Blue Tanager, handsome creature, beautifully coloured. The class also contained three glorious Superb Tanagers, whose comparative commonness gives them no chance against rarer birds; a Scarlet Tanager—winner of Special 235, belonging to Messrs. Thwaites and Lloyd—very tame and neat; a pair each of Chinese and Japanese Zosterops, affording an interesting comparison, and a single bird of the former species. Another very interesting comparison was afforded by a hen Blue Sugar Bird, exhibited by Mr. Swan, and the cock bird of the same species, which won the extra 3rd prize. One or two exhibits were absent.

Class 150. 10 *Entries. All species of Crows, Pies, Starlings, Mynahs, Hangnests, Jays, and Troupials.* 1st, Mr. Osbaldeston, with the most superlatively conditioned bird I have ever seen—a Purple-headed Glossy Starling, so perfect indeed, that it appeared covered with a thin sheet of greenish blue steel rather than feathers. 2nd, Mr. Osbaldeston's very handsome Hunting Cissa, one of the Indian Crows, clothed principally in a dress of beautiful light green. 3rd, Mr. Townsend, a beautiful Andaman Starling, splendid condition and well shown. V.H.C., Mr. Osbaldeston, nice pair of Green Glossy Starlings, though one of the birds spoilt the exhibit by not being quite so fine as its mate. H.C., Mr. Gartside, a single Green Glossy Starling—how different these birds are from our English Starlings! C., Mr. Osbaldeston, very fine pair of Blue-bearded Jays: most interesting birds. There was also a Bobolink Hangnest in this class, well shown, but being out of colour its real beauty was lost. Dr. Butler gives an account of the bird in his "Foreign Bird Keeping," Vol. II. page 8. I do not remember seeing the bird at a Show before.

Class 151. 3 *Entries. Rare-feathered Foreign Birds* *and Hybrids.* 1st, and Special 236, Mrs. Cooper, with a pretty pair of Hybrid Parrakeets, Red-rump-Rosella. Not by any means a difficult cross, but interesting nevertheless. 3rd, and Special 237, Mr. Clayton, a Hybrid bred between a Grey Java Sparrow and an African Silverbill; a curious bird, showing the bad points of each parent without presenting any of the good ones. The other bird, described by its owner —surely in a fit of enthusiasm—as a Hybrid between an English Chaffinch and an American Nightingale, was quite ignored by the Judges, on account of it bearing a much too-striking resemblance to an ordinary hen Chaffinch.

Class 152. 15 *Entries. All species of Insectivorous and Fruit-eating birds, not comprised in the above.* 1st, Mr. Fyfield, a handsome Touracou, in beautiful condition and very tame. A decidedly uncommon bird, especially at shows. Deserved to win. Described as a "Clock Bird," possibly a local native name. 2nd, Mr. Osbaldeston, quaint Green-billed Toucan in splendid condition and looking well. 3rd, Mr. Townsend, Blue-winged Green Bulbul, a very beautiful creature, and well shown. 4th, and Specials 231 and 242, Mr. W. B. Frostick, one of the Foreign Thrushes (*Turdus fumigatus*) bearing a resemblance to our English bird. Grand condition and shown to perfection—indeed I considered it the best shown bird in the Section and well worthy of its honours. V.H.C., and Special 232, Mr. Townsend's fine Blue-cheeked Barbet. Also V.H.C., Mr. Batchelor, a handsome Indian Shamah in nice condition, and an Indian Dyal Bird, belonging to the same owner, somewhat scarce at Shows. The class contained several Pekin Robins, one of which left no doubt of its sex, by singing beautifully.

Class 153. 16 *Entries. Selling Class for Foreign Birds, price not to exceed* 15/-. 1st, and Special 238.

Mr. Hawkins's perfect pair of Rufous-tailed Finches. 2nd, Mr. W. B. Frostick's Desert Trumpeter Bullfinch. 3rd, Mr. Osbaldeston, a Black Tanager, not at all dear at 15/-. V.H.C., Mr. W. B. Frostick's pretty little pair of aviary-bred Zebra Finches. H.C., Mr. Woodhouse's handsome pair of Sharp-tailed Finches, which I thought ought to have had a higher honour. C., Mr. W. B. Frostick's pair of White Java Sparrows, also might have gone beyond the Zebra Finches. There were also two or three other pairs of both Ruficauda and Grassfinches, and some absentees.

Class 154. *Selling Class for Foreign Birds, price to exceed* 15/-. Cancelled.

Class 155. 6 *Entries. Suitable Cages and Aviaries for Foreign Birds.* This should have been a very interesting class, but unfortunately the entries were few, some cages which ought to have been entered here, having been placed in the General Cage Classes. 1st and Special 208, Mr. Acutt, a highly ingenious quarantine or occasional cage, which I hope to see described fully in *Bird Notes* some day. 2nd, and Special, Mr. Newley, a beautifully made Flight Cage for small birds. 3rd, a nice cage for small birds—very suitable. This gentleman also exhibited a good Exhibition Cage, and a very massive brass Parrot Cage and Table.

The success of the Show, from the Foreign bird point of view, was entirely due to the indefatigable efforts of the Show managers of our section, Mr. Swan and Mr. Townsend. No praise is too great to bestow upon their conduct of the affair from beginning to end, and the satisfactory result of their labours must have been very pleasing to them.

The Show—and its Work.

By the Hon. Show Managers—Foreign Bird Section.

It has been suggested that our Members would be interested to learn particulars of the work and general management of our Show which has just concluded.

Well, to begin with, our Council wisely made it conditional that if the Show Committee accepted the L, C. B. A's invitation, a sufficient guarantee should be found, so that any possible loss should not fall on the Club. Our first appeal did not result in this guarantee being forthcoming, and the Show Committee had to regretfully decline the invitation. We were then asked to reconsider our decision, and a second appeal meeting with a gratifying result, the Council sanctioned the acceptance.

Having definitely pledged ourselves for the responsibility of the Foreign Bird Section, full details were supplied the Show Committee (by the L. C. B. A.) who, after drawing up the classification and prize money, and selecting the Judges appointed, gave us discretionary powers to act as circumstances required. We then invited members and friends to offer Special Prizes for competition, or contribute donations to the Prize Fund, and the result was gratifying in the extreme, nearly 60 Specials being secured for our Section—a far larger number than has ever been offered before.

The next step consisted of collaborating with the officials of the L. C. B. A. and the N. B. B. & M. C., in the large amount of clerical work such an undertaking necessitates, such as sending out schedules, booking entries, answering enquiries, and so forth.

Journeys were also made to the Crystal Palace to confer with the officials respecting many important details, and at last everything was satisfactorily arranged. The week previous to the Show had to be devoted to the compilation of the Catalogue, checking proofs, and sending labels, and passes where necessary, to exhibitors.

The staging was erected three days previous to the Show, and on the Monday immediately preceding the exhibition the birds arrived at the Crystal Palace. Fortunately the weather, though somewhat cold, was quite free from fog, so there was but little delay in the birds reaching their destination. On arrival, a band of willing workers rapidly unpacked and checked each consignment, and the birds were then taken to their respective classes and fed and watered. As the evening drew to a close, the birds arrived in ever increasing numbers, and several of us passed the night at work in the Palace, so that no birds should be left uncared for until the morning.

We gave our first consideration to the Foreign birds, and when we had suitably provided for them, willingly lent a helping hand to the other Sections.

The Judges had been asked to arrive early, and when they came at about nine o'clock, our foreign birds were all on their best behaviour. Long and serious were their deliberations, but at last the awards were made, the prize cards were written out and affixed to the cages of the winners, and then the Special Prizes had to be awarded. These took longer, if anything, than the others, but that also came to an end, and when the cards had been placed in position it was practically on the stroke of two o'clock, the opening time. The Judge's slips were then handed to the printer, and catalogues containing the list of awards were received later in the day—very prompt and commendable work. Catalogues were, of course, on sale when the Show opened, but these did not contain the awards.

Very neat and pleasing the exhibition looked at the moment of opening. All litter had been swept up, birds were in position, many singing happily in the sunlight, which streamed through the great glass roof, and the air was faintly scented with the disinfectant which liberally besprinkled the floor. The staging was everywhere covered with bright crimson baize, which lent an air of warmth and cheerfulness to the scene.

The next thing was lunch, and this over, our Council held a meeting in the Concert Room at the Palace and discussed various matters. This in its turn was followed by a meeting of the Members in the same place, due notice of which had been posted in the Secretary's Office. Both meetings were well attended, and in the evening our Council met a Committee representing the N. B. B. & M. C.

The exhibition closed at ten o'clock, and the next day, after the birds had been attended to, the rest of the time was very pleasantly spent with members and friends. The last day dawned, and at four o'clock all excepting officials left the Show. The birds were then rapidly taken from their classes, carefully checked with the entrance forms, placed in their travelling cages and consigned to the various railway company's men who were waiting to receive them. Some of our members who had a long journey before them were enabled to take their birds away before the crush began, and at five o'clock or a little before, other exhibitors, who had called for their birds, were admitted.

After this the birds rapidly disappeared, and within three or four hours the benches were practically bare. We hope and believe that all the exhibits arrived home none the worse for their journey.

Thus has ended our first Show. That it was a success there can be no doubt, though we had certainly hoped for far more than 195 entries in our Section. Perhaps members will, with a confidence borne of experience, be more ready to send their birds another year—at least we hope they will.

Financially, we shall probably have a small balance to hand to the Club, and are extremely pleased to state that we do not think it will be necessary to call on any of the members who so kindly supported the guarantee fund.

Personally, we have had to pay the price, but if the members appreciate our efforts to forward the Club and its interests, we shall feel that our troubles have not been borne, and overcome, in vain.

Foreign Soft-billed Birds at the Palace.

By Russell Humphrys.

TAKING the classes consigned to me at the recent Amalgamted Show in rotation, the first class was No. 149. (*All species of Tanagers, Sugar Birds, Sun Birds, aud Zosterops*).

This class contained several birds of exceptional merit, the first prize being awarded to an excellent example of the Magpie Tanager (*Cissopis leveriana*). I believe the same bird was exhibited at the previous Palace Show, and the writer was informed that it had moulted in an outdoor aviary. A very fine specimen of this handsome Tanager was for some years to be seen in the Insect-house at Regent's Park.

Second Prize was taken by a Yellow Tanager (*Calliste flava*) catalogued as a Golden and Green; (a rare bird in the pink of condition and plumage, in fact looking better than I have ever seen it before). A Green-headed Tanager (*C. tricolor*), catalogued as a

Tricolored, was awarded third prize, equally perfect as far as condition and staging were concerned, but hardly so rare a bird. A very sweet Blue Sugar-bird (*Dacnis cayana*) took an extra third. What a sensation the first example of this beautiful species created when exhibited some years since at the Palace! If I remember rightly it was a female in adult plumage, and won the Special Prize for the best foreign bird in the Show. The last few years this charming little bird has been more freely imported and can now be bought at a reasonable price.

A White-capped Tanager (*Stephanophorus leucocephalus*) took fourth prize. This particular bird looked as if he had managed to get some sticky substance on to his plumage, which was matted and dull; perhaps he is an old bird. At Regent's Park there was for many years a very perfect *S. leucocephalus* to be seen in the Insect House. On one occasion only have I ever had the opportunity of obtaining the female of this brilliant Tanager. Other noticeable exhibits in this class were a Blue-and-Black Tanager (*Tanagrella cyanomelæna*), a Silver-blue Tanager (*Tanagra cana*), several Superbs (*C. fastuosa*), two or three pairs of Zosterops, a nice hen *Dacnis cayana*, and a Scarlet Tanager.

Class 150. *All species of Crows, Pies, Starlings, Mynahs, Hangnests, Jays, and Troupials.* A lordly list surely! but I was disappointed on examining the class. A very perfect Purple-headed Glossy Starling (*Lamprocolius auratus*) easily stood at the head of the class, a Hunting Crow (*Cissa venatoria*) coming second; what a pity it is that this elegant bird cannot be moulted in confinement without losing its brilliancy of plumage; numerous examples have been in my possession at different times, but the secret of successfully moulting this handsome *Cissa* true to colour, so to speak, has yet to be discovered. This particular bird was undoubtedly cage-moulted and in too small a cage to do himself justice. Third prize went to an Andaman Starling (*Poliopsar andamanensis*), and a very good one too. Other exhibits included a pair of Blue-bearded Jays (*Cyanocorax cyanopogon*), a pair of Glossy Starlings (*L. chalybeus*), and several single birds of the latter species.

Class 152. *All species of Insectivorous or Fruit-eating Birds, not comprised in the above.* A nice Senegal Touracou (*Turacus persa*), indifferently staged, took first prize, a Green-billed Toucan (*Ramphastos dicolorus*) coming second. A very perfect Blue-winged Bulbul (*C. hardwickii*) was awarded third prize. What wonderful songsters and mimics the latter birds are. If I were compelled by circumstances to limit myself to one bird *C. hardwickii* would be my choice.

Fourth prize was awarded a Thrush, I took to be *Turdus leucomelas*, but as I had not a catalogue to refer to, I do not know if I was correct. This bird was in perfect plumage and faultlessly staged, and altogether a most interesting if soberly-plumaged exhibit. This class also contained a fair Green Bulbul (*C. aurifrons*), an excellent Shâma (*Cittocincla macrura*) in song, a very good Dyal-bird (*Copsychus saularis*), a particularly bright Blue-cheeked Barbet (*Megalæma asiatica*), and several Yellow-bellied Liothrix (*L. luteus*), Altogether a very creditable collection.

I conclude by expressing my sincere thanks to the able and energetic representatives of the Foreign Bird Club, who materially lightened my labours.

POST MORTEM REPORTS.

(*Vide Rules*).

TRICOLOR TANAGER. (Mr. Porteous). This bird, which was very anæmic and emaciated, died of a chronic and general septicæmia, the immediate cause of death being the brain hæmorrhage which so often results in this disease.

MADAGASCAR WEAVER. (Mr. Swan). Chronic enteritis combined with pneumonia and extravasation of blood on the surface of the brain was the cause of death.

NONPAREIL. (Miss Barker). All the organs were apparently healthy except the kidneys. These were much congested, probably through cold.

ORANGE WEAVER. (Mr. Swan). The condition of this bird was practically the same as that of the Madagascar Weaver, except that there was no cerebral hæmorrhage.

CORDON BLEU. (Dr. Hopkinson). This bird shewed macroscopical signs of catarrhal pneumonia, and the liver and intestines were also much congested. Pressure of work prevented any microscopical examination, which I regret.

BENGALI. (Mr. Dart). This bird, which was found dead in the aviary, had died of double pneumonia.

JAVA SPARROW. (Mr. Porteous). Enteritis of septic character was the cause of death. Hæmorrhage into the brain and its coverings was also present as a result of changes in the blood which accompany this disease. The liver also was affected.

VIOLET TANAGER. (Mr. Fillmer). This bird had been ill ever since it was bought—six weeks before its death. It breathed heavily and towards the end had diarrhœa. On examination the intestines appeared healthy, but the liver and spleen were soft and congested, as were also the kidneys and to a less extent the lungs. In the subcutaneous tissue over the posterior position of the skull there were two large cheesy deposits, not tuberculous.

BICHENO FINCH. (Mr. Fillmer). Pneumonia was the cause of death. It was of recent origin, and had probably been due to the remote influence of cold and damp upon a weakly system.

SKYLARK. (Mr. Berry). I regret that by the time this bird reached me its condition was not such as to render it possible to make any definite examination.

Canary. (Mr. Horton). Acute double pneumonia of recent onset was the cause of death.

Grey Parrot. (Mrs. Fowler). This bird did not belong to a member, but to a local friend of mine. Its health was good for two years and seemed to be so up till within two days of its death. It died of a disease which is more often found in Fowls than in cage-birds, and which is characterized by the presence of the aspergillus fumigatus (one of the mould-fungi) in the air passages, air sacs, and sometimes, as in this case, the lungs. (The air sacs are bag-like cavities communicating with the lung, and in mammals are represented as an attenuated survival by the pleuræ, as the result of "evolution by atrophy.") In this particular case the symptoms before death were those of pneumonia. Several instances have occurred of this disease (pneumono mycosis) being communicated to man.

Budgerigar. (Mr. Harman). Apoplexy was the cause of death—not associated with septic disease.

Canary. (Mrs. McAdam). There were no symptoms of internal disease in this bird, but there was a large blood clot at the base of the brain, causing death by apoplexy.

W. Geo. Creswell.

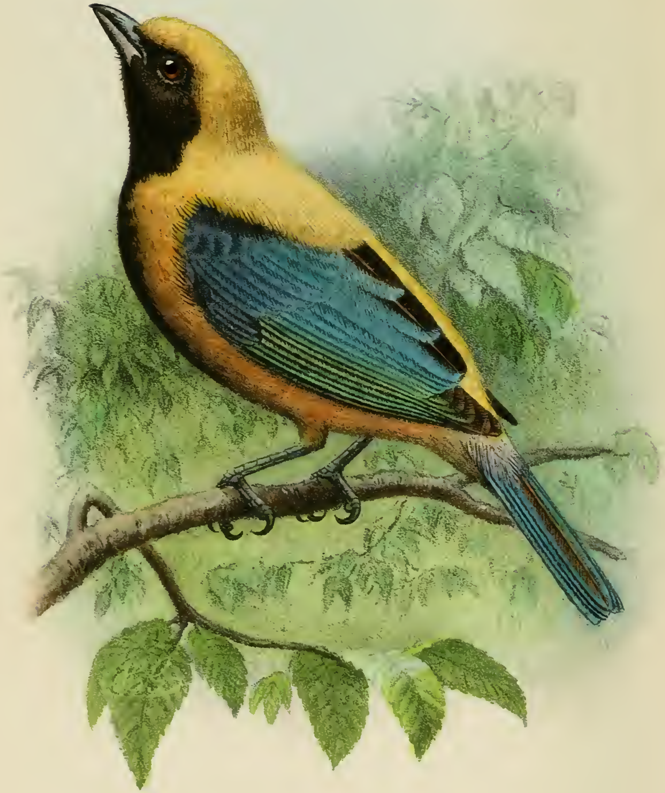
Correspondence.

RATS.

Sir,—You ask for something with which to combat rats. The plan I use is to place round the aviary, in the ground, sheet iron or fine wire netting some 15 or 18 inches deep, with the lower part bent outward nearly at right angles for about six inches.

In blocking the runs with concrete a little broken glass should be added to the cement.

John Acutt.



H. Goodchild del et lith.

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GOLD & GREEN TANAGER.

Calliste flava.

The Yellow or "Gold and Green" Tanager.

By S. M. Townsend.

Our Editor has asked me to write an article on my Gold and Green Tanager, who forms the subject of the coloured plate in this month's magazine.

I came across him quite by accident in the summer of 1902. He was among a number of Tanagers, mostly Superbs, which had just arrived; they were all in very bad condition, and he especially was very bare and dirty, but he seemed healthy, so I bought him and took him home. I have always been very glad I did so, for he bathed vigorously at the first opportunity and started moulting, and got into fair condition in quite a record time. I was unable to identify him when I first had him, so I called him the "Gold and Green Tanager," but I afterwards found out from the British Museum that he was the Yellow Tanager (*Calliste flava*).

There is no need for me to describe the colouring of the male, as Mr. Goodchild has provided us with such a beautiful portrait of him, but I may say that he has slightly altered since I first had him, having assumed a tinge of chestnut with the yellow on the flanks and a bluer shade on the wings, so I think he must have been immature when I purchased him. The female is thus described in the British Museum Catalogue: "Greenish fulvous; wings and tail black, edged with greenish; below paler, middle of throat and belly whitish ; sides of throat and breast slightly varied with dark markings ; flanks and crissum ochraceous.

Habitat: S.E. Brazil, from Pernambuco to Rio Grande do Sul.

In the *Ibis*, 1881, page 332, Mr. W. A. Forbes, on "Eleven Weeks in N.E. Brazil," says: "This beautiful though peculiarly coloured Bird is, perhaps, with the exception of *Tanagra cana*, the commonest Tanager in the provinces I visited. I met with it everywhere, from Recife to Garanhuns, and though never seen in numbers, it appears to be fairly abundant. It frequents chiefly gardens or plantations of fruit trees, but I have also seen it in thick forest country. It was abundant in the Garden at Estancia, frequenting the orange trees, Sapotis (*Achras sapota*) and other fruit-bearing plants ; and I have also met with it feeding on the flowering shrubs of the virgin forest. It goes about singly or in small companies, and most of the specimens seen are either immature or females. The adult males are usually met with singly, though I have seen three perched close together in the same tree. I failed in my endeavours to bring living specimens to England, though I got one as far as St. Vincent."

In Sclater's "Monograph of the Tanagrine genus Calliste," it says: "Prince Maximilian of Neuvied, who gives excellent descriptions of both sexes of this Tanager in his 'Beiträge zur Naturgeschichte von Brasilien,' first met with it on the Mucuri in the province of Porto Seguro." There, he says, it was not uncommon in the sandy bush bordering the sea-shore, and he also noticed its occurrence in many other places. Like most of the other Tanagers it has no song, but only a short call cry.

Azara inserts it in his "Apuntamientos" under the name of *Lindo billo*, but never met with it himself alive in Paraguay, the specimen described having been purchased dead.

Professor Burmeister, our most recent authority on the birds of Brazil, mentions its occurrence near New Frieburg.

Swainson obtained specimens of this Tanager in the vicinity of Pernambuco, where, he says, " it is not uncommon, frequenting the gardens and feeding on the smaller sized fruits, and it is abundant in collections of skins imported from Rio and Bahia. It probably extends all through eastern Brazil, though I do not believe it reaches so far north as the Amazon, which seems to be the line of separation between many of the Brazilian and Guiana species."

I have found the *Calliste flava* a very timid bird and difficult to tame; he feeds principally on fruit and hardly touches his insectivorous food, in fact, he eats less than any Tanager I have ever kept. The only thing he shows a preference for is a grape, which I can get him to take from my hand after a good deal of persuasion.

The Story of Bird-Death.

By W. Geo. Creswell, M.D. Durh., L.R.C.P., F.Z.S.

(Continued from page 263).

Now that we have glanced at the different degrees of immunity against septicæmia shown by the great family of wild and domesticated Finches and their hybrids, and also by the large class of birds which is colloquially known under the comprehensive title Insectivorous, the question as to the influence of egg-food on captive bird-life practically ends, since the relationship to septic disease on the part of those birds that remain to be considered is (as far as I know at present*) to all intents and purposes outside any influence wielded by this article of food.

At this juncture, therefore, it seems advisable to recapitulate in somewhat precise terms the limits and scope of the connection between egg and the disease under notice, and the more so because on the part of some aviculturists there appears to be considerable difficulty in recognising what is the true position, and in understanding what it really is that I have said on this subject. For instance, by the exercise of what we may perhaps regard as poetical license, I have been made to say by one and another that septic fever always follows when egg is given ; that abstinence from egg means perfect immunity from septic disease ; that egg food is the only cause of this ; and that egg is dangerous because it is more readily infected by septic bacilli than are most substances. To be obliged to ascribe such absurd opinions to me in the face of what has been advanced, argues but little for the strength of the position taken up by my critics, because what I have been trying to make quite plain to my readers in the interests of both themselves and their birds, and with a view of freeing them from the mischievous consequences of archaic beliefs and superstitions, is this :—*that when infected—either before or after ingestion—and when at the same time exposed to the high temperature peculiar to the avian organism, egg food renders the descendants of the original infecting bacteria more than usually active in throwing out their special toxins ; and that these toxins are, in consequence of their special environment, more virulent and deadly than those which owe their origin to those bacteria which are commonly met with outside the influence of egg.*

The inevitable corollary from this is that many of those birds, who *with* egg food succumb to the action and effects of the *everywhere present* septic bacteria, would have escaped had they been *without* this article of food.

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* I am here more particularly alluding to swimming and wading birds and poultry.

But quite apart from all this, and also apart from the fact that on general grounds, connected with the physiological process involved, it imposes too great a strain on the digestion and assimilation of captive seed and insect eating birds, the egg is not in any way necessary for them, either in the adult or nestling stage of existence, in spite of all that may be said to the contrary. And moreover there is no need for any special substitute for it, any more than there is in our own case when giving up any bad or unnecessary habit. If it is desired to breed extra large birds this can more surely and more permanently be attained to by taking advantage of the natural laws of heredity, and by breeding from only those parents which shew a *natural variation* in the direction of increased size, than by feeding up the birds which are intended for stock and then depending on the broken reed of a supposed transmission of acquired characters. As an instance of what is meant by this, let us look for a moment at the Lancashire Canaries. Is it egg feeding that has been responsible for their great bulk? Or is it the steady and continuous artificial selection that has been adopted for so many generations by their devotees? If it is the egg, then why have the German Canary and the Border Fancy remained so small? In the first of these two latter varieties there has been up till very lately no selection at all as to physical properties, and even now this selection is only of very limited range: in the second the selection has been in the direction of at least not increasing the size of the birds. So here we see that the egg has made the German no bigger than it has ever been, and although the Border is " literally stuffed with egg " (as I am told by some of its most prominent fanciers) it is not thereby prevented from remaining the pigmy of the purely fancy race of Canaries.

Exceptionally large Canaries and hybrids have been bred in my own aviaries without using a particle of this substance, or indeed anything beyond the ordinary seeds (including hemp and oats), green stuff, and a few bread crumbs, but simply by relying upon parent birds of *naturally* large size, and upon their tendency to produce offspring with more or less their own characteristics. And what can be done by one man can be done by another. So much, therefore, for the value of egg as far as this is concerned.

If colour feeding is embarked upon, then the colouring agent can be given in plenty of excipients other than egg. The presumed difficulties in connection with this can be easily got over by mixing the colour with such substances as oatmeal, satoo, or ordinary pea-flour, all of which are highly nutritious and highly acceptable to birds as soon as they have been taught to eat them—a matter that presents no difficulty whatever.

It has been urged by some of those who, unlike the Athenians, avoid that which is new and who worship only at the dimly lighted shrines of European mediævalism, while admitting that what they call the hardier section of birds may possibly be yet more hardy when removed from the influence of egg, that the insectivorous species cannot be kept alive in captivity if deprived of this fetish-like material. On this point they are very emphatic, but I am afraid that these gentlemen, misled by the arbitrary lines that are necessarily adopted by the systematic naturalists, and knowing little or nothing of the true facts comprising the operations of digestion or of the physiological gradations by insensible steps that exist from one end of the avine scale to the other, are guilty of drawing a hard and fast line where in reality none exists. All the birds we have hitherto discussed, even including most of the Parrots, and perhaps all of them, are more or less insectivorous. If therefore what our friends call the hardier of these can exist in comfort and health without insects and without egg, as we have seen, for many years, and are moreover still more hardy without the latter than with it, then there ought to be no insuperable difficulty in realizing that the "delicate insectivorous" species would be even less delicate when the egg is withheld from them also, especially when we see that beyond this they already can, and in most cases do, get all that is necessary to them while captive in the way of insect food.

Needless to say the cathedral utterance alluded to is launched forth by my critics with the usual backing of what is called "experience," and with nothing else to support it. We shall presently see what this is worth. Of course no one can afford to deny the value of real experience—that is of the record of facts. But for the purpose of correct and close reasoning—if this is to be productive of incontestable conclusions, the facts must be many, and they must be *facts* in the logical sense of the word "fact." In addition to this all other possible factors that might make for the supposed conclusion must be absolutely eliminated, that we may thereby avoid the too common pitfall of the *post hoc, propter hoc* argument. The tendency to generalize from only a few particulars, and to add to these few a further admixture of what are only opinions,* or indeed sometimes only hopes, is unfortunately too often found among writers on aviculture. An amusing instance of this occurred not long ago where a writer gravely attributed the recovery of the tail end of his lot of birds from septic fever to the fact that he had festooned his bird-room with strings of peeled onions! Anyone with the least knowledge of the nature of epidemic infectious disease will at once recognize that these few cases at the end were the ordinary instances of spontaneous recovery which are always met with in epidemics of every kind, even the most fatal, and which are due partly to the fact that the most resistive individuals are naturally among the last attacked, and partly to the fact that all diseases of this class appear to lose a good deal of their virulence of type towards the end of the visitation.*

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* "Few men think, all have opinions."—HOBBES.

But our friend knew nothing of this, and therefore immediately gave a lecture on the Bird Plague, and published a paper as well, in which without having made the slightest attempt to prove his case or even to collect evidence, he gave a confiding and grateful public to understand definitely that of all the things he used it was to these wonderful onions he owed the remains of his team of birds! There is no doubt but that on the strength of this "experience," we shall now see onions growing in every back yard, and shall in time have only a traditionary acquaintance with septicæmia as an extinct disease. Let us hope so!

Another gentleman, having from time to time lost many birds from a more chronic form of the disease, in which the sufferers have a succession of fits before finally dying of cerebral hæmorrhage, one day gave a few drops of castor oil to a bird which had just come round from its first convulsive attack. For a few days it had no return of the seizure, so he promptly took his pen and informed me that he had now found a "certain cure." Unfortunately, however, for the reputation of this drug, which is by the way not unknown to medical men, and which I am not by any means condemning, the poor little bird a few days afterwards had one or two fits and died. Now what would have happened if by good luck that particular bird had permanently recovered through his own inherent powers of resistance? Why the "certain cure" would have been immediately published in print, with the "experience" to prove it, and there you are, don't you know! And if, let us say, thirty or even twenty per cent. of such cases were in the habit of spontaneously recovering, quite independently of that or any other drug, the validity of our friend's conclusion would be immediately established and the drug would get the unmerited credit of being in these cases a veritable precious balm of Gilead.

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* I am myself of the opinion that the latter half of this explanation is little more than the first expressed in a different way, and that the degree of virulence in the disease is only the reflection in inverse ratio of the degree of resistance in those individuals who remain unattacked till the end of the epidemic.

Those who extol egg food as a fitting sustenance for insectivorous birds are not perhaps in such plight as the gentlemen just adverted to, but their claims to serious attention only differ in the matter of degree. Generally speaking the experience put forward by them is just the limited and narrow amount that has fallen to their own share in a comparatively short span of years. Some few, it is true, go a step further and affect to adduce a general experience on the part of aviculturists extending over a whole century. Lest by the exercise of any undue moderation on their part their argument should lose any weight to which it may be entitled I would point out that this estimate is probably much too little, for, as I have previously shewn, not only has egg food been used for Canaries while breeding for considerably more than two hundred years, but we also find from different 18th century sources that it was even then traditionally well known to some as an article of diet recommended for various warblers and other soft bills. But whatever the exact period of its extent has been, the recorded experience of its effects has been incomplete. The experience, such as it is, has also been a one-sided one, i.e. it has only been of the use of the egg and not of its non-use. The old game of "Follow my leader" comes so easy and natural in our noviciate days, and we have always been so afraid of trying any experiments in our later stages—which is after all the only way of gaining empirical experience—that it has occurred to but very few of us to strike out new lines of enquiry for ourselves. And when from time to time some would-be bolder spirit than the rest has left the beaten track, it has been with fearful steps and quavering mind, only to rush back in dire alarm on hearing the slightest rustle in a bush to the narrow way of our comparatively recent forefathers. The result is that while every science and every art known to mankind has enlarged its outlook, improved its methods, and increased our power of guiding the forces of Nature, and while with the rest the science and art of Medicine as applied to humans has progressed by leaps and bounds, we are still content, where our birds are concerned, to crawl slowly along the paths laid down in the days of the densest scientific darkness, those of the later European middle ages, whose chief claims to remembrance are connected with the persecution of all who attempted to lead their brethren to the paths of light. Of the non-use of egg we ourselves *as a class* know nothing; of its use we almost daily see the results, but without any sense of the connection involved; we ascribe these results to anything and everything but the right one—each of us to something different from his neighbour's choice; and finally with one voice acclaim "Experience"!

If mere length of one-sided observation is a factor that makes for comparative validity of conclusions, (and I suppose that even the most "experienced" of us will allow so much), then the one-sided experience of universally treating consumption with the warm and dirty air and the sedative drugs prescribed by twenty centuries of medical tradition should by this time have culminated in this treatment being even more unassailable than the like one-sided experience of egg food during two or three centuries. Now what was the sum total of this prolonged experience of phthisis and its treatment? That it was always fatal within about two years from its onset, and that it was hereditary. And what on the other hand has been the result of that which has been somewhat flippantly alluded to as "a little microscopical investigation"? That in little more than a decade we have learnt the folly, the uselessness, and the positive mischief of our old methods. We have been brought to see both the non-hereditary character of the disease, and that by simply adopting the precise contrary of our hitherto long-worshipped treatment it is not even necessarily fatal.

(*To be continued*).

The Blackcap.

By SEPTIMUS PERKINS.

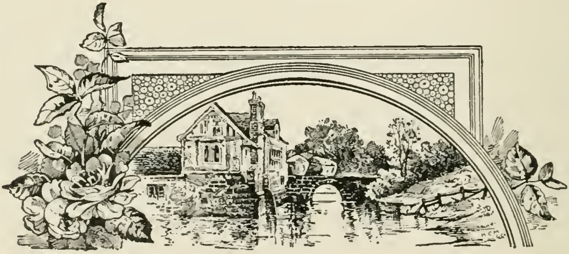
THE diverse opinions expressed as to the delicacy of this charming bird in confinement are extraordinary. Personally, I have found it an extremely easy bird to keep, and I believe that is the general opinion, but Dr. Bradburn, no mean authority, pronounced it "a very much more delicate bird than the Nightingale," and adds "Both male and female are sweet docile little creatures, and seem to appreciate what you do for them; still, in spite of every care, the average duration of life in these birds when caged is certainly short; a large number die in the moult."

I think the explanation of the difficulty which Dr. Bradburn appears to have experienced in keeping this bird is to be found in the advice he gives—"feed it just as I have recommended for the Nightingale." Now the Nightingale is an almost exclusively insectivorous bird, while the Blackcap is a fruit-eater.

I remember reading an article some years ago which related the treatment of caged Blackcaps in the Canary Islands—how they are there fed entirely on fruit, varied with such flies as they can catch, and of which a very considerable number are attracted to the cage by the fruit. Doubtless in this climate a more nitrogenous diet is desirable—but I believe the secret of keeping the Blackcap in health is to supply it constantly with fruit.

I am not quite sure how long I have had my Blackcap—but I know that it is not *less* than five years. He always has fruit in his aviary—generally banana—and is in the most perfect health and plumage, singing delightfully each spring. He has besides a soft-food mixture containing ants' eggs; but no mealworms or other live insects—in fact he does not care for mealworms.

The Blackcap seems to me to be much the easiest to keep, of all the smaller British soft-bills.



Notes on Some of the Rarer Parrots at the Crystal Palace Show in December, 1903.

By RANDOLPH QUIN.

THE ROCK PEPLER (*Polytelis melanura*) is a somewhat rarely-imported bird allied to Barraband's Parrakeet, and a beautiful and interesting pet, whether in cage or aviary. The more correct English name is "Black-tailed Parrakeet." The origin of the strange term "Peplar" or "Pepler" is uncertain—but it has been suggested that it is a corruption of "Pebbler," meaning a bird which frequents rock pebbles. It is a native of Southern and Western Australia, where it appears to be fairly common. Although a risky investment when newly imported, the Rock Pepler becomes a reasonably hardy bird, and lives well on a diet of seed, varied with fruit. The species has recently been bred in this country by more than one aviculturist.

THE WHITE-EARED CONURE (*Pyrrhula leucotis*), is one of the prettiest and most interesting of the Conures. It is not very often met with in this country, though by no means rare. It is easily tamed and quite hardy, but is rather dangerous with other birds. All the Conures are screamers, but probably the White-eared is the least troublesome in this way. It is a native of Brazil.

THE TUI PARRAKEET (*Brotogerys tui*) is the smallest of the so-called "Small-billed" Parrakeets, and by many people considered the most attractive, on account of its very gentle disposition. It can be distinguished from its congeners by the patch of yellow on the forehead. This is another South American bird, but not nearly so hardy as the Conures—in fact it requires to be kept warm, and, in this country, thrives best as an indoor pet. Some years ago it was considered a great rarity, but lately a good many have been imported. It is a bird which the aviculturist will always do well to secure, when he can get it at a moderate price. Canary seed and fruit, such as banana, are all that it requires for food. Like all *Brotogerys*, most examples are easily tamed, and then become very amusing and affectionate pets.

THE VARIED LORIKEET (*Ptilosclera versicolor*) has only been known in this country, as a living bird, for a little over a year. It is a very beautiful and attractive bird, though I understand that some who have kept it find it somewhat dull and uninteresting. It is stated that the brighter-coloured birds are by no means necessarily the cocks, and that the difference in plumage is merely due to age, the pale examples being immature. The Varied Lorikeet is a native of the North of Australia, where it feeds almost entirely on the honey or pollen of flowers. In captivity it appears to thrive on the milk sop which forms the most satisfactory diet for Lorikeets, and soft fruit.

THE RED-COLLARED LORIKEET (*Trichoglossus rubritorques*) is another rare Australian Lorikeet, very closely allied to the common Swainson's or "Blue-mountain Lory." This species is found in the North of Australia, and the Swainson's in the east. It is readily distinguished from the Blue-mountain by the red collar, from which it takes its name. A few examples were obtained by the Zoo in 1900, and lately a well known dealer has had some for sale.

* * *

The Crystal Palace Show of February, 1904.

We call this the "February" Show to distinguish it from those held at the Palace in the autumn—February being the month in which it is almost always held—but this year the Show opened on the 29th January and closed on the 2nd February, so it might be called the January Show with equal appropriateness.

In the foreign classes there were only 122 entries, not including 14 Foreign Goldfinches and Bullfinches. This is about a dozen less than last year, and less than two thirds of the entry in the foreign classes at the December Show.

Almost all the exhibits had appeared previously at the Palace, and (with one exception) the Show contained no novelties whatever—consequently it was lacking in interest. The attendance of visitors was poor, and the whole affair seemed flat and lifeless. We cannot help thinking that three Crystal Palace Shows in one season are too much of a good thing.

Mr. Camps judged the Parrot Classes and Mr. Russell Humphrys the other birds. Both Judges discharged their tasks with their usual skill.

The prize-winners being in almost every case the same as at the last Show, we shall give only a very condensed report of the Classes.

Class 110. *Budgerigars and Love Birds.* First, Mrs. Anningson (with the Peach-faced Love Birds formerly Mr. Storey's, which won that exhibitor so many prizes). Second, Thorne, Budgerigars. Third, Mrs. Anningson, Peach-faced Love Birds. Fourth, Mrs. Cooper's Peach-faced Love Birds. An entry of Budgerigars was disqualified as it consisted of two cocks.

Class 111. *Parrakeets, Lorikeets, and Lories.* First,

L. W. Hawkins, Varied Lorikeets. Second, W. Osbaldeston, Red-bellied Conure (*Pyrrhura vittata*)—a rare bird, which we do not remember to have seen before at a Show. Third, Miss Rosa Little's Blue Mountain Lories (unwisely fed on canary seed and hemp). Fourth, Tyson and Kearton, Alexandrine. Extra Fourth, Osbaldeston, Crimson-wing. V.H.C., Bultell, Rosella. H.C., Young, Crimson-wing. C., Manby, Quaker Parrakeets (not often seen at Shows).

Class 112. *Grey Parrots, Amazons, Cockatoos, Macaws.* First, Lister, Black Cockatoo. Second, H. B. Smith, Red and Yellow Macaw. Third, Hecker, pair of Greys. Fourth, McDiarmid, Red and Blue Macaw. V.H.C., Osbaldeston, Green-cheeked Amazon. H.C., A. Jones, Grey. C., Dobbs, Blue-fronted Amazon.

Class 113. *Common named species.* First, S. M. Townsend, Zebra Waxbills. Second, Thorne, Orange-cheeks. Third, Jenner, St. Helena Waxbills. Fourth, Frostick, Zebra Finches. V.H.C., Bultell, Orange Weaver. H.C., Picard, Diamond Finch. C., Housden, Zebra Waxbills.

Class 114. *Waxbills, Greenfinches and Mannikins.* First, *Lagonosticta niveiguttata.* Second, Spotted Fire Finch. Third, Red-faced Finch. Fourth, Vinaceous Finch (all Mr. Hawkins'). V.H.C., Townsend (Lavender Finch), Osbaldeston (cock Crimson Finch). H.C., Mrs. Cooper (Cordon Bleu). C., Mrs. Anningson (Rufous-tailed Finches).

Class 115. *Grosbeaks, Fire Finches, and Buntings.* First, Mrs. Cooper, Green Cardinals—not at all good colour. Second, Osbaldeston, Red-crested Cardinal—poor in colour and "thick" when we saw it. Third, H. B. Smith, cock Olive Cuba Finch. Fourth, Young, a very good Pope. V.H.C., Hawkins, hen Olive Cuba. H.C., H. B. Smith, Saffron Finches. C., Hawkins, Grey Singing Finches. We should have altered the order of some of these awards.

Class 116. *Tanagers, Sugar-birds, Zosterops, Bulbuls, &c.* Here all the prizes (except an extra third) fell to Mr. Townsend. First, his "Gold and Green" Tanager, of which a coloured plate appears in this issue of *Bird Notes.* Second, Tri-coloured Tanager, which we hope to figure another time. Third, Blue-winged Green Bulbul. Fourth, White-capped Tanager. Extra Third, Hawkins, Blue Sugar-bird V.H.C., Clark, Japanese Zosterops. H.C., Frostick, Scarlet Tanager. C., H. B. Smith, Blue-winged Green Bulbul.

Class 117. *All Species not comprised in the above.* The defects in the classification resulted in this class (which is mainly intended for the larger soft-bills) becoming a receptacle for all sorts, including White Java Sparrows, Weavers, Whydahs, and a Black Vasa Parrot. First, Osbaldeston, Purple-headed Glossy Starling. Second, Fyfield, Senegal Touracou. Third, Osbaldeston, Short-billed Toucan (this bird had a fit during the Show, and seemed partially paralysed). Fourth, Townsend, Andaman Starling. V.H.C., Harper, Grey-winged Ouzel. H.C., Miss Jackson, White Javas. H. B. Smith, Red-headed Starling. C., H. B. Smith, Purple-headed Glossy Starling.

The Show was held in a so-called "tent" in the nave, but as the tent was open all round, above about ten feet from the ground, it was little better than useless as a protection from the draught. When we were at the Show on the second day, the draught was bad enough to be most uncomfortable for humans, and many of the birds appeared to be suffering from its effects. The arrangements made by the Crystal Palace authorities for the Show in December were very much to be preferred, for the long curtains then used completely shut off all draughts.

POST MORTEM REPORTS.

(*Vide Rules*).

TEXTOR WEAVER. (Mr. G. Grace). This bird showed the typical signs of septic intoxication. The intestines were inflamed, there was a patch of pneumonia in left lung, and an effusion of blood on the surface of the brain and into the airspaces of the skull. The septic bacillus was swarming.

BUDGERIGAR. (Mr. Moxon). In this case no symptoms of illness had been detected. On examination there was found well marked congestion of the intestines, and the vent feathers were very dirty: the final cause of death was the usual extravasation of blood from one of the vessels of the meninges. Microscopically the septic bacillus was present in great quantity.

CRIMSON-CROWNED WEAVER. (Mr. Grace). The liver was in a state of fatty degeneration, the spleen congested, but not much enlarged, and the intestines, which were intensely congested, contained undigested seed. A vessel had given way on the brain. The intestines contained swarms of bacilli.

GOLDFINCH. (Mrs. Dutton). The right lung was the seat of pneumonia, and there was an extensive hæmorrhage on the surface of the brain, which was deeply congested.

ORPINGTON PULLET. (Dr. W. T. Greene). This bird was excessively fat—a layer half an inch thick covering all the abdominal organs. The pericardium also was invested with the same material, a prolongation of which extended downwards between the hepatic lobes. She had pneumonia of the right lung, and inflammation of the upper third of the oviduct and the adjacent mesenteric folds. There were eggs in various stages of development, but none of them had yet entered the oviduct, which was empty in its entire length. The duodenum was also inflamed.

COMBASSOU. (Mr. Dart). Not noticed to be ill: was found dead. There was pneumonia of the right lung combined with a cranial extravasation of blood.

LONG-TAILED GRASS FINCH. (Miss Margaret Feilding). A ruptured shell-less egg was in the lower end of the oviduct, which was much inflamed. No treatment would have availed anything.

DWARF FINCH, hen. (Mr. Fillmer). After apparently only two days' illness this bird was found dead. The liver and spleen were much congested and there was some jaundice present.

BULLFINCH. (Mr. Dart). This bird, which died in my presence in a fit, had been for some time subject to diarrhœa and difficulty of breathing. The intestines were inflamed (enteritis), the lungs were healthy, and there was intense congestion and effusion in the skull. The bird had become very emaciated.

Gouldian Finch. (Mr. Porteous). Acute double pneumonia, combined with enteritis and jaundice was the cause of death. The bird was well nourished.

W. Geo. Creswell.

Correspondence.

SOAKED BREAD FOR PARRAKEETS WHEN REARING YOUNG.

Sir,—In your last number Dr. Creswell, in his "Story of Bird-Death," tells us that he regards the practice of giving soaked bread to Parrakeets when feeding young as a "mere fad." As I have repeatedly used this food, and often advised others to do so, I hope you will permit me to give my reasons for considering it extremely useful for rearing young Parrakeets.

I have reared Cockatiels, Budgerigars and Redrumps in numbers, and as I rarely if ever lost a young bird, I think I have some reason to consider that my method of feeding was not far wrong.

When I first commenced with a pair of Cockatiels the first brood consisted of five young birds. These were easily provided for for the first few days, but it was soon quite evident from the behaviour of the parent birds that the dry seed and green food supplied were not sufficient, and that they wanted something more. When I approached the aviary they would fly towards me and ask me, in the plainest manner, for something that could be more easily and rapidly converted into suitable food for their hungry babes.

I have always considered egg-food of all descriptions unsuitable for Parrots; and the same applies to milk-sop, except in the case of the Brush-tongues, so I tried stale bread soaked for a minute or so in cold water and then squeezed out. This the birds took to immediately, and the young were reared without any trouble. I have since invariably supplied it to my Parrakeets when breeding.

Consider the enormous number of canary-seeds the parents would have to shell in order to provide for a hungry brood of from five to ten youngsters, for the latter number is by no means unknown in the case of Budgerigars. To expect parents to rear such broods on dry seed and green food alone would be unreasonable. Soft food of some kind appears to me to be necessary therefore, or at any rate most advisable, though I do not mean to say that young Parrakeets cannot be reared without it.

Dr. Creswell says, that "if bread is necessary for young birds it should be given to the parents in a dry state, and it will be sufficiently moistened by them before being given to the young." I quite agree that the parents will themselves moisten it before giving it to the young, for, had Dr. Creswell had much experience in feeding Parrots he would know that sooner than eat dry bread they will, if they possibly can, drag it to their drinking-water and soak it themselves. Several times I found that the Cockatiels had done this when, in hot weather, the bread had become too dry for their liking.

Whether it be a "stupid fad" or not to give soaked bread to Parrakeets when rearing young, the fact remains that this addition to their ordinary diet at such times is highly appreciated by them, and they are thus enabled to rear their young with much less difficulty than if it were withheld; and although I know of hundreds of young birds having been reared in aviaries in which this food formed a daily item in the menu, I have never known a case of a young bird dying from its ill effects. Are we then to give it up just because we are told that it is not good *in theory*, when *in practice* we know that it is? D. SETH-SMITH.

SIR,—I am always glad to read the record of anyone's experiences with the view of learning interesting and important facts therefrom, and those of Mr. Seth-Smith in relation to any of the Parrot tribe will at all times specially commend themselves to me. But I feel that I must protest against his too evident mingling of assumption with fact when he records his experiences for the purpose of criticizing me.

The appreciation of soaked bread by his feeding birds, and even their assumed asking for it that makes such a pretty word-picture, is scarcely an argument that it is good for their young ones. Even human beings with their much more highly specialized brain functions need to be sometimes protected against their longings and likings, and we can all of us immediately recall to our minds many very nice things that are allowed on all hands to be bad for us.

My critic very pointedly assumes that I have not much experience in feeding Parrots. This is a mistake on his part and therefore cannot help him in his argument. It is now nearly thirty years since I first possessed one of these birds; since then, and more especially in later years, I have been on terms of great intimacy with a very great number, and have moreover studied with diligence the breeding habits of great numbers of Parrakeets. As a result of this "much experience" I am in a position to say that it is the solitary Parrot in a cage that is addicted to dropping his food occasionally into the water, and that then it is generally by a palpable accident or else when he is not hungry and desires to play with his biscuit or crust in default of a better toy; of course he often eats it afterwards—sometimes to his own disadvantage. In the same way he will often deliberately place a cotton-reel or a coin in the water, and fish it out again time after time.

When I have seen breeding Parrakeets (including my own) supplied with bread they have just eaten it as it was. But it is not absolutely necessary to them, and it will be found on reference that when writing the phrase "If bread is necessary" I emphasized the "*If*"; to my own knowledge many hundreds of Budgerigars have been brought up on nothing but seed, greenmeat, and water. That they can be brought up in even batches of ten on this diet is not unknown, nor is it "unreasonable" seeing that it is natural to them, but even supposing that their parents are too lazy when well fed to shell sufficient seed for so large a number, it would be better to sacrifice half of them than to run the risk of killing all. I can assure Mr. Seth-Smith that there is this risk, and that I have come to this conclusion only after a considerable experience of being *behind* the scenes after death to an extent which I am sure is appreciated by neither himself, nor any other aviculturist.

And now comes another and the most mischievous assumption of all. Mr. Seth-Smith says that although he knows of hundreds of birds having been reared on soaked bread, he has never known a case of one dying from its ill effects. He then goes on to contrast what he knows "*in practice*" with what I lay down "*in theory.*" Surely it is Mr. Seth-Smith himself who is here theorizing. Until last month he never knew what its ill effects were; indeed he does not even yet know what its ill effects are beyond the very limited information that I have as yet given, because I have not yet touched upon any description of pathological processes. In addition to this it can only be a matter of guessing on his part as to what his young birds have really died of: I am quite sure he does not *know* anything about what did kill them: how could he? How then is he justified in assuming a positive value to his asserted negative knowledge, and in saying that he has never known of a young bird dying of its ill effects? He is in exactly the same position as the man who was cautioned against getting in and out of the train while in motion lest he should be killed, and who answered that it was all nonsense and that he had done it often without getting killed. Yet the railway companies have *seen* enough people killed by the practice to warrant their warnings. My critic's "practice" amounts to this: he thinks soaked bread is good because he has had but few of his particular birds—evidently a very immune lot—die *after* its use, and because not being in any sense a pathologist he naturally cannot connect with it what deaths have occurred. My "theory" consists in my being able to connect the two facts, *i.e.* soaked bread and death, on grounds that Mr. Seth-Smith cannot in the nature of things know anything about.

There is just one difference between the Railway Companies and myself. They, being in a fiduciary position towards the reckless man, make laws to protect him against himself; I, not being in the position of being my brother's keeper, simply warn him to the best of my ability and knowledge, and then leave him alone to follow his own bent.

W. GEO. CRESWELL.

P.S.—I may say that when writing my article I was not aware that Mr. Seth-Smith recommended soaked bread, and that the expression "stupid fad" was therefore not intended to bear any personally offensive meaning.

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The Foreign Bird Club.

A POST CARD addressed to me accompanies this issue of "Bird Notes." I shall be much obliged if *each* member will *at once* fill up, sign, and return this to me, as I have to issue the voting papers for our annual election by the 1st of April. The object in asking members whether they are willing to stand for election, is simply to eliminate those who would refuse to accept office if elected. It is hoped that the great majority will return an affirmative answer, as it is desirable that the number of candidates should be as large as possible.

I may explain that the duties of the Council, while by no means merely nominal, are not at all onerous. No meetings are held, and all that is required of members of the Council is that they shall be prompt in replying to letters on Club business.

I believe it to be the wish of a large number of members that there should be more representatives on the Council of the non-exhibiting, and strictly amateur, members. And if some ladies are willing to serve, I feel sure they would be welcomed.

I shall be pleased to serve as Secretary for another term, if elected, but I should like my friend Mr. Swan to serve with me as joint Secretary. If this arrangement meets with the approval of the members, we propose to ask them to allow Mr. Swan and myself to settle between us the allocation of our respective duties.

The reproduction of Miss Brooksbank's charming drawing in this number of "Bird Notes," is, I hope, the first of a series from that lady's hand. The Club must congratulate themselves upon possessing a member with such an undoubted talent for the delineation of bird life. It is intended to publish, either next month or in May, another drawing which Miss Brooksbank has already executed, and which I think will be considered even better than the Whydah.

I regret that this number of our Magazine is so largely occupied with Show Reports—chiefly on the British Bird and Hydrid Sections—but we have now reached the end of the Show season, and there will be no more Show Reports before

October. I hope the balance will be redressed next month, and that our April issue will be of quite special interest to non-exhibiting lovers of foreign birds.

HORATIO R. FILLMER,
Hon. Sec.,
52, SHIP STREET, BRIGHTON.

19th March, 1903.

TO THE HON. SEC. OF THE FOREIGN BIRD CLUB.

SIR,—As a member of the Council who will *not* seek re-election, I venture to take upon myself the responsibility of calling the attention of my fellow members to the great importance of the election of the Council which is about to take place. When the present Council was elected, twelve months ago, the Foreign Bird Club was still in the experimental stage, and it was open to doubt whether it would live to become a flourishing Society. Since then the membership has doubled, and I take it that all question as to the success of the venture is at an end.

Under these circumstances it is essential to the well-being of the Club that really representative members should compose the Council.

We are a union of exhibitors and non-exhibitors. Let us see that each section is adequately and equally represented. Let us take care that the representatives of the exhibitors are men of leading among the exhibitors themselves, and that the delegates of the non-exhibitors are selected from those members who take an active part in the work of the Club, and particularly in writing for "Bird Notes."

And in order that this may be done, it is necessary that the members who would be suitable for election, shall themselves intimate their willingness to serve. I appeal to them to do this.

RANDOLPH QUIN.

NOTICES TO MEMBERS.

NEW MEMBERS ELECTED.

Mrs, **ROGERSON**, Fleurville, Cheltenham,

Mr. J. **HARMAN**, The Bridge, Wealdstone, Harrow.

Mrs. **HEALEY**, 18, Albert Road, Regent's Park, N.W.

Mr. **HENRY DART**, 53, Richmond Road, Kingston-on-Thames.

Mr. **GEORGE THWAITES**, Dunedin Villa, Northampton Road, Market Harborough.

Mr. J. H. **WALKER**, F.R.H.S., 20, Moorgate Street, Leicester.

Mr. E. **PERKINS**, Chester Hill, Woodchester, Glos.

Mr. **HERMANN KESTERMANN**, 50, Grafton Street, Manchester.

Mr. J. **HALLIWELL**, M.R.C.V.S., 11, Westbourne Grove, West Kirby. (Mem. Avic. Society, introduced by Mr. **FILLMER**).

Mr. **HENRY** J. **BULL**, 116, Upper Kennington Lane, S.E. (Mem. Avic. Society, introduced by Mr. **SWAN**).

NEW MEMBERS PROPOSED.

Rev. W. H. **HIGGINS**, Thormanby, Easingwold.
Mr. **HUGH** L. **BROOKSBANK**, Walkington, Beverley.
Proposed by Miss **BROOKSBANK**.

Mr. A. W. H. **HARVEY**, 124, Alexandra Road, Wimbledon.
Mr. **CYRIL** H. **BRETHERTON**, 12, The Paragon, Blackheath.
Miss **CAMPBELL**, Market Square, Ely, Cambs.
Proposed by Mr. **SWAN**.

CASES FOR BINDING VOL. I. OF "BIRD NOTES."

These are now ready, and can be obtained from Mr. J. A. Swan, 87, Lower Kennington Lane, S.E., price 1s., or 1s. 2d. post free. Mr. Swan will also undertake to get the parts bound and return the book post free for an inclusive charge of 2s. 1d. A remittance must in every case accompany the order, and if the parts are forwarded they must, of course, be sent post free. When only a case is ordered it should be stated whether the five parts of "Foreign Bird Notes" are to be bound up with "Bird Notes" proper.

THE FOREIGN BIRD MARKET.

The charge is one penny for every four words, including address. All advertisements must be pre-paid, and reach the Hon. Sec. of the F.B.C. by the 10th of the month.

Pair Zebra Finches, 5/- ; odd hen, 3/- ; also from garden aviary, splendid specimen of a Bronze Mannikin-Bengalee hybrid. Offers.

Mrs. Dutton, Bank Cottage, Walton, Stone, Staffs.

Pair Violet-necked Lorikeets and Patagonian Conure, prize winners. What offers? Have also high-class Norwich Canaries for disposal, besides British and Foreign Birds, including some grand Snow Buntings and Shorelarks, Siskin and Goldfinch mules, and tame Virginian Nightingale. F. Yallop, 85, Prince of Wales Road, Norwich.

Harting's "Handbook of British Birds," latest edition, practically new, 30/-. Sharpe's edition of "Layard's Birds of South Africa," latest complete work on this subject, good condition, cover slightly worn, £2.

T. Whitehead, Deighton Grove, Yorks.

Pair Java Sparrows, 3/6; Spice-bird, 3/6; Three-coloured Mannikin, 3/6; St. Helena Waxbill, 3/6; Combassou, 5/- ; *Sycalis arvensis*, 5/- ; two Goldfinch mules, 10/- each; ten hen Canaries, 3/6 each. James Storey,

7, Blenheim Terrace, St. John's Wood, N.W.

The Foreign Bird Club.

THERE being no competition for the Secretaryship, Mr. Swan and myself have been duly elected as joint Hon. Secretaries as from the 1st of May next. The result of the elections for the other offices appears in the Scrutineer's report.

For the present, at any rate, it is intended that I shall act as Editorial Secretary, and that Mr. Swan shall be Exhibitional and General Secretary. Therefore all MSS for publication in "Bird Notes," and applications for advice as to treatment of birds, should be sent to me—while all communications about Shows and general business should be sent to Mr. Swan.

All subscriptions for the year commencing on the 1st of May next should be sent to the Treasurer, the Hon. W. B. Wrottesley, 8, Herbert Crescent, S. W.

Mr. Swan has won, by a very large majority, the prize offered to the member proposing the largest number of new members during the year.

I believe that Dr. Creswell's offer to undertake *post mortems* for the members will be largely taken advantage of. May I be pardoned for suggesting that those who avail themselves of his kindness will best shew their appreciation of it by carefully complying with his conditions?

HORATIO R. FILLMER, *Hon. Sec.*,
52, SHIP STREET, BRIGHTON.

21st April, 1903.

NOTICES TO MEMBERS.

NEW MEMBERS ELECTED.

Rev. W. H. HIGGINS, Thormanby, Easingwold.
Mr. HUGH L. BROOKSBANK, Walkington, Beverley.
Mr. A. W. H. HARVEY, 124, Alexandra Road, Wimbledon.
Mr. CYRIL H. BRETHERTON, 12, The Paragon, Blackheath.
Miss CAMPBELL, Market Square, Ely, Cambs.
Dr. W. GEO. CRESWELL, F.Z.S., Eden Lodge, Kingston-on-Thames. (Mem. Avic. Society, introduced by Mr. DART).
Mrs. JAMES BARBER, Milestone Cottage, Wickford. (Mem. Avic. Society, introduced by Mr. SWAN).
Mr. HAROLD BOYD, Barton House, Didsbury, Manchester. (Mem. Avic. Society, introduced by Mr. FILLMER).

NEW MEMBERS PROPOSED.

The Rev. W. J. CONSTABLE, Uppingham.
Mr. C. A. CATTLE, Thurston, Bury St. Edmunds.
Mr. J. FRANZ, 25, Greek Street, London, W.C.
Mr. EDWIN J. N. HARVEY, Stirton, Victoria Road N., Southsea.
Mr. MARK E. RYCROFT, 8, Park Street, Wakefield.
Proposed by Mr. SWAN.

Miss M. C. GROSVENOR, Tittensor Chase, Stoke-on-Trent, Staffs. *Proposed by* Mrs. DUTTON.

⁂ The current year of the Club expires on the 30th April. If there are any members who wish to resign at the end of the year, they are requested to give notice of their intention before that date—otherwise they will become liable for next year's subscription.

A list of members of the Club will shortly be published. Any change of address (or other desired alteration) should therefore be communicated to one of the Hon. Secretaries forthwith.

SCRUTINEER'S REPORT.

I have examined the 79 voting papers received and herewith append the result of election.

COUNCIL.

Dr. W. G. Creswell	61	S. M. Townsend	45
Dr. E. Hopkinson	60	Rev. R. E. Gorringe	36
Dr. C. B. d'E. Chamberlain	58	J. Storey	36
J. Frostick	56	Mrs. Belford Wilson	33
W. Osbaldeston	56	Mrs. Anningson	28
W. Oakey	46	Miss M. E. Baker	27
*Hon. W. B. Wrottesley	46		

C. Cushny	26	N. S. O'Reilly	17
F. C. Thorpe	26	C. W. Perryman	13
Miss T. Saywell	23	T. H. Bond	12
H. B. Smith	21	Mrs. Healey	12
J. J. Mumford	18	J. E. R. McDonagh	7
A. Bullock Webster	18		

* Mr. Wrottesley, having been elected as Treasurer, cannot, under the rules, be elected as an ordinary member of the Council. Of which, however, he is an *ex officio* member.

TREASURER.

Hon. W. B. Wrottesley	44	W. Osbaldeston	29

JUDGES.

W. Swaysland	66	H. T. T. Camps	49
W. Osbaldeston	60	S. M. Townsend	47
J. Frostick	54	R. Humphrys	36
F. C. Thorpe	33	T. Turner	22

"BIRD NOTES" PRIZE COMPETITION.

J. A. Swan	14
Dr. E. Hopkinson	11
Dr. Simpson	9
J. Frostick	6
Randolph Quin	2
H. J. Fulljames	1

One voting paper disqualified—unsigned.

6 Gosforth Terrace, Andrew Philip.
Gosforth, 17*th April* 1903.

POST MORTEM EXAMINATIONS.

Dr. Creswell has kindly consented to undertake *post mortem* examinations for the members, upon the conditions mentioned in his letter printed below. Members who wish to avail themselves of Dr. Creswell's services are requested to carefully read the conditions before despatching bodies. The dead birds *must* be sent to

W. GEO. CRESWELL, ESQ., M.D., F.Z.S.,
Eden Lodge,
Kingston-on-Thames

Any which may be sent to the Secretaries will *not* be forwarded to Dr. Creswell, but immediately destroyed.

Eden Lodge, Kingston-on-Thames.
April 2nd, 1903.

Sir,—I shall be pleased to undertake *post mortem* examinations for the members under the following conditions.

(1) The birds must be sent *immediately* after death. I do not propose to do rough and ready work, and so the birds must be as fresh as possible in order that the changes taking place after death may not vitiate the results of microscopical examination.

(2) The birds must be sent direct to me in some sort of box, and carriage paid. Bacteriological examination is lengthy and expensive, and I must at least be put to no extra and avoidable expense by the members.

(3) Each body must be accompanied by as many details as possible as to *(a)* length of illness, *(b)* symptoms of illness, and *(c)* particulars as to lodgement and feeding, especially noting whether inga seed and egg food have been given.

(4) I will do the work gratuitously unless a *letter* of report or advice is wished for. In this case a fee of 2s. 6d. must be sent. In all cases my report will be published in "BIRD NOTES," whether or not one has been privately sent to the owner.

W. GEO. CRESWELL, M.D., F.Z.S.

CASES FOR BINDING VOL. I. OF "BIRD NOTES."

These are now ready, and can be obtained from Mr. J. A. Swan, 87, Lower Kennington Lane, S.E., price 1s. 2d. post free. Mr. Swan will also undertake to get the parts bound and return the book post free for an inclusive charge of 2s. 1d. A remittance must in every case accompany the order, and if the parts are forwarded they must, of course, be sent post free. When only a case is ordered, it should be stated whether the five parts of "Foreign Bird Notes" are to be bound up with "Bird Notes" proper.

⁂ Those members who promised to take cases are requested to communicate with Mr. Swan again, stating which size case they require—and forwarding the parts if they wish Mr. Swan to undertake the binding.

BOUND COPIES OF VOL. I.

These can now be obtained from Mr. Fillmer, price 10/6 to members, 15/- to non-members, (post free).

THE FOREIGN BIRD MARKET.

The charge is one penny for every four words, including address. All advertisements must be pre-paid, and reach the Editorial Secretary of the F. B. C. by the 10th of the month.

Four Abrahams' patent seed cabinets, four holes each, with partition to take two kinds of seed, Parrakeet size, zinc, 5/- each or 17/6 the lot.
NICHOLAS O'REILLY, Royal Crescent, Ramsgate, Kent.

The Foreign Bird Club.

NOTICES TO MEMBERS.

Members will please note that all subscriptions are now due, and should in every case be forwarded direct to the Treasurer, the Hon. W. B. WROTTESLEY, 8, Herbert Crescent, S.W.

Dr. HOPKINSON has most kindly undertaken to assist the members in the identification of species. All queries, therefore, as to the names of birds should be sent to him at 9, Holywell, Oxford. In all cases the fullest possible description of the bird should be sent, and a stamped addressed envelope enclosed.

Queries as to the treatment of birds, aviary construction and management, and general avicultural points, should still be sent to me, and will be either answered by me personally or forwarded to some member of the Council better qualified to advise on the subject.

With this issue each member will receive a few of the new cards which have been prepared with the object of helping us to increase our membership.

The Council trusts that each one will endeavour to distribute these cards among friends or others who would be likely to join the Club.

A further supply of cards will be forwarded to any member on application to either of the Hon. Secretaries.

HORATIO R. FILLMER, *Hon. Editorial Secretary,*
22nd June, 1903. 52, SHIP STREET, BRIGHTON.

NEW MEMBERS ELECTED.

W. J. GIBBERD, 35, Dartmoor Street, Notting Hill Gate, W.
F. SPENCE, 7, Holly Street, Durham.
J. C. BENNETT, 32, Victoria Road, Widnes.
JOHN WADSWORTH, 14, Beacham Road, Southport.
NORMAN DENTON, 19, Oakland Road, Hillsbro', Sheffield.
J. J. FOULIS, 1, Stonecliff Terrace, Fairfield, Buxton, Derbyshire.
R. H. CLARKE, M.A., M.B., 80, Hamlet Gardens, Ravenscourt Park, W.
W. NICHOLSON, 22, Alfred Street, Gateshead.
H. WARDLE, Willington House, Willington Quay.
J. T. HOLLINS, 7, Lowther Arcade, Harrogate.
H. W. MATHIAS, F.R.H.S., Doone Cottage, Thames Ditton, Surrey. (Mem. Avic. Soc., introduced by Dr. CRESWELL).
J. G. BARBER, Waverley House, Melton Road, Leicester. (Mem. Avic. Society, introduced by Mr. WALKER).

NEW MEMBERS ELECTED—*continued.*

The Countess of WINCHELSEA and NOTTINGHAM, Harlech, Merioneth.

The Hon. LILLA de YARBUGH-BATESON, Heslington, York.

Miss MINNIE BARNS, F.Z.S., 52, Fitzroy Road, Regent's Park.

JOHN BOWES, 7, Marine Terrace, Herne Bay.

P. C. KEYTEL, Brighton Castle, Mouille Point, Cape Town, Cape Colony.

FRANK BATHE, 5, Montgomery Road, Sharrow, Sheffield.
(Members of Avic. Society, introduced by Mr. FILLMER).

NEW MEMBERS PROPOSED.

H. R. B. TWEED, B.A. Oxon., Laindon Frith, Billericay.
Mrs. J. MCADAM, 24, Cambridge Terrace, Hyde Park, W.
HARRY IDE, L.D.S.R.S.C., 12, Fife Road, Kingston-on-Thames.
G. N. MOTTRAM, Stoke Courcey, Bridgwater.
Miss MARY E. NICHOLSON, Grove Cottage, Grove Road, Wallasey, Cheshire. *Proposed by* Dr. CRESWELL.

Miss MARGARET FEILDING, Broome Park, Betchworth, Surrey.
Proposed by the Hon. W. B. WROTTESLEY.

E. C. DAY, 238, Cromwell Road, Peterborough.
Proposed by the Rev. R. E. P. GORRINGE.

J. STICKLAND, Charlecote House, Stoneygate, Leicester.
Proposed by Mr. WALKER.

Mrs. THOMPSON, The Limes, Hanwell, Middlesex.
S. BIDE, Highlands, Guildford Road, Farnham, Surrey.
J. F. HATCHER, 168, Upper Thames Street, E.C.
JAMES HUME, Hepscott, Morpeth.
A. W. WATSON, 9, Dudley Drive, Partickhill, Glasgow.
Mrs. HULTON, Hulton Park, Bolton-le-Moors.
CHARLES HALLIDAY, Bridge Street, Banbridge, Co. Down.
Miss MAY PANTON, 14, King Edward's Road, Oldfield Park, Bath. *Proposed by* Mr. SWAN.

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POST MORTEM EXAMINATIONS.

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1. The dead birds *must* be sent to W. G. CRESWELL, Esq., M.D., F.Z.S., Eden Lodge, Kingston-on-Thames.
2. They must be sent *immediately* after death, in some sort of box, carriage paid.
3. Each body must be accompanied by as many details as possible as to *(a)* length of illness, *(b)* symptoms of illness, and *(c)* particulars as to lodgement and feeding, especially noting whether inga seed and egg food have been given.
4. The work will be done gratuitously unless a *letter* of report or advice is wished for. In this case a fee of 2s. 6d. must be sent. In all cases the report will be published in "Bird Notes," whether or not one has been privately sent to the owner of the bird.

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MEMORANDA FOR MEMBERS.

All subscriptions run from the 1st of May, and should be paid as soon as possible after that date—or, in the case of new members, as soon as possible after joining the Club.

All subscriptions should be sent to the Hon. Treasurer, the Hon. W. B. WROTTESLEY, 8, Herbert Crescent, S.W.

All dead birds for *post mortem* examinations should be sent to Dr. CRESWELL, Eden Lodge, Kingston-on-Thames.

All queries as to the names or identification of birds should be sent to Dr. HOPKINSON, 9, Holywell, Oxford.

All MSS. for publication in "Bird Notes," queries as to treatment of birds, advertisements for "The Bird Market," and orders for back numbers or extra copies of "Bird Notes," should be sent to H. R. FILLMER, 52, Ship Street, Brighton.

All other communications should be sent to J. A. SWAN, 87, Lower Kennington Lane, S.E.

THE BIRD MARKET.

The charge is one penny for every four words, including address. All advertisements must be pre-paid, and reach the Editorial Secretary of the F. B. C. by the 10th of the month.

Blue-fronted Amazon in splendid feather, capital talker, great variety of expressions, no swear words; been in England 6 years, charming companion. Price 10 guineas, including cage. Open to nearest offer; approval if carriage paid both ways. F. URCH, 18, Grosvenor St., Camberwell, S.E.

Pair Silver Pheasants, 21/-; Pair Golds, 25/-; Hen Yellow Budgerigar, 12/6; Cock Saffron, 3/-; Cock Californian Quail, 7/6; Snow Bunting 2/-

GEORGE MOSS, Loughboro', Leices.

Finding that I shall not be able to exhibit during the coming season, I have reluctantly decided to dispose of the whole of my exhibition birds. It would be a pity to part them, as at present they are magnificent teams. Exhibitors should not hesitate to snap them up, as they are not half their cost, therefore much below their value. I have classified them in three lots:

LOT 1.—My noted Clear Mule, description is superfluous as he is too well known; a big four pointed evenly marked Buff Goldie Canary, bred in 1902, not colour fed and never been shown, he's a gem; a 5-pointed Yellow Goldie Canary, nice size, excelling in type and quality; a very lightly marked Buff Linnet and Canary, capital size; a Dark Buff Greenie Canary, a very large bird, grand colour; a Goldie-Bully Hybrid, a big winner; a Dark Buff Twite and Canary. Seven absolute winners. £28 10/-; the Clear is almost worth the money.

LOT 2.—Six Goldfinches, 2 Greenfinches, 1 Chaffinch, 1 Brambling, 1 Hawfinch, the largest and best coloured bird ever caged. Every bird is a genuine winner, *i.e.* they have won in good company. Eleven birds, £12 12/-, not one half their value.

LOT 3.—A grand King Parrot in new square 20in. parlour cage, he is in lovely plumage and condition: has been in this country 12 months. A grand pair of Red-headed Gouldians also in splendid plumage. £4 4/- the lot.

All the above are in the very best health and condition, and every bird has won in their respective classes except the 4-pointed Mule and the King Parrot. Anyone taking the 3 lots £42; a chance in a life time. The above prices include their show cages.

W. PIERCE-WILLIAMS, Forester's Charity, Llandudno.

The Foreign Bird Club.

NOTICES TO MEMBERS.

The Council offers a prize of the value of one guinea to the member who shall have contributed to Vol. II. of "Bird Notes" matter on the subject of Foreign Birds of the greatest value and interest. The prize to be awarded by the votes of the members, and to consist of a book or other article selected by the winner.

It has also been decided to inaugurate a Breeding Competition. The prize in this case will consist of a certificate. The certificate will be awarded to the member who shall have the greatest success in breeding foreign birds during the present season. Rarity of species bred to be the first consideration. The awards will be made by the Magazine Committee upon reports furnished by the breeders, which must reach the Editorial Secretary before the 1st of December next. The Committee will require such confirmation of the facts as they may deem necessary or desirable.

Further, the Council offers a medal to any member who successfully rears any species of foreign bird not previously bred bred in captivity in the United Kingdom. The young must live to be entirely independent of their parents. In this case, also, the awards will be made by the Magazine Committee, under the same conditions with regard to the confirmation of facts as in the former competition.

The Magazine Committee is empowered to settle all the details of these competitions.

It has been jointly decided by the Finance Committee and the Magazine Committee to suspend the issue of "Bird Notes" for August—thus following the precedent of last year. The reasons for this step are chiefly financial, but owing to so many members being holiday-keeping during the month of August there is a difficulty at that time in maintaining the interest in the Club. The next issue of "Bird Notes" will consequently appear in September.

Dr. Creswell will suspend the *post mortem* examination of birds during August, except in those cases where immediate letters of report or advice are desired.

The Balance Sheet for the year ending 30th April last is published in this issue, and shews a credit balance of a few shillings.

The recent increase in the membership is very satisfactory and should spur us all on to greater exertions. We now number well over 200—but require at least 300 to secure our financial equilibrium.

HORATIO R. FILLMER, *Hon. Editorial Secretary,*
22nd July, 1903. 52, SHIP STREET, BRIGHTON.

NEW MEMBERS ELECTED.

H. R. B. TWEED, B.A. Oxon., Laindon Frith, Billericay.
Mrs. J. MCADAM, 24, Cambridge Terrace, Hyde Park, W.
HARRY IDE, L.D.S.R.S.C., 12, Fife Road, Kingston-on-Thames.
G. N. MOTTRAM, Stoke Courcey, Bridgwater.
Miss MARY E. NICHOLSON, Grove Cottage, Grove Road, Wallasey, Cheshire.
Miss MARGARET FEILDING, Broome Park, Betchworth, Surrey.
E. C. DAY, 238, Cromwell Road, Peterborough.
J. STICKLAND, Charlecote House, Stoneygate, Leicester.
Mrs. THOMPSON, The Limes, Hanwell, Middlesex.
ARTHUR R. BIDE, Highlands, Guildford Road, Farnham, Surrey.
J. F. HATCHER, 168, Upper Thames Street, E.C.
JAMES HUME, Hepscott, Morpeth.
A. W. WATSON, 9, Dudley Drive, Partickhill, Glasgow.
Mrs. HULTON, Hulton Park, Bolton-le-Moors.
CHARLES HALLIDAY, Bridge Street, Banbridge, Co. Down.
Miss MAY PANTON, 14, King Edward's Road, Oldfield Park, Bath.
W. T. GREENE, M.A., M.D., F.Z.S., 282, Portobello Road, North Kensington, W. (Mem. Avic. Society, introduced by Dr. CRESWELL).
PAUL LEVERKÜHN, M.D., C.M.Z.S., C.M.A.O.U., etc., Director of the Scientific Institutions and the Library of H.R.H. the Prince of Bulgaria: the Palace, Sophia, Bulgaria.
Miss PEDDIE WADDELL, Balquhatstone, Slamannan, Stirlingshire, N.B.
(Members of Avic. Society, introduced by Mr. SWAN.)
H. GOODCHILD. 34, Fitzroy Road, Regents Park, N.W.
(Mem. Avic. Society, introduced by Mr. FILLMER).

NEW MEMBERS PROPOSED.

Mrs. H. Beale Collins, 18, Lingfield Avenue, Kingston-on-Thames.
G. H. Cordery, 20, Fenwick Road, East Dulwich.
Thomas Salt, L.R.C.P., Yiewsly, Saltley, Birmingham.
Alfred H. Creswell, M.D., Cinderford, R.S.O., Gloucestershire.
C. W. Woodhouse, Portmore, Merton Road, Bedford.
Proposed by Dr. Creswell.
Heber J. Mason, Ashburn, Harrogate.
H. A. J. Hudson, 16, Billington Road, New Cross, S.E.
Proposed by Mr. Swan.
W. H. Barker, Norwood House, Clifton Road, Rugby.
Proposed by Mr. Walker.
Mrs. J. E. Davies, Granby Street, Littleport, Isle of Ely.
Proposed by Mr. Camps.
Mrs. James Howe, Moss Lodge, Ashton-under-Lynn, Lancashire. *Proposed by* Mrs. Healey.
A. C. Slatter, 17, Commercial Street, Hereford.
Proposed by Miss Saywell.

THE FORTHCOMING SHOW SEASON.

The Show Committee have granted the Club's Medals to the following Shows up to the present date. Grants to other Shows will doubtless be made, and these will be duly announced.

The Show Committee express the earnest hope that members will support the Shows at which our Medals are offered for competition, and so help to make foreign bird exhibiting more popular.

Norwich. Oct. 10th and 12th. F. B. C. classification for six classes. One Silver Medal, one Bronze. Judge, Mr. Hills.

Preston. Oct. 14th and 15th. F. B. C. classification for three classes. One Bronze Medal. Judge, Mr. Battye.

**L. & P. O. S. (Crystal Palace).* Oct. 27th, 28th, and 29th. Classification approved by Show Committee for eight classes. One Silver Medal, one Bronze. Judge, Mr. Swaysland.

Lincoln. Nov. 24th and 26th. F. B. C. classification for three classes. One Bronze Medal. Judge, Mr. Broadley.

Mr. Swan will be pleased to hear from members wishing to offer Special prizes at any of the above Shows, before Sept. 1st.

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* The L. & P. O. S. are considering the advisability of adopting our Classification for nine classes in its entirety. If they decide to do so, one Silver and two Bronze Medals will be granted.

AN IMPORTANT INVITATION FROM THE LONDON CAGE BIRD ASSOCIATION.

We have been invited by the London Cage Bird Association to undertake the Foreign Bird Section at their next Show. We believe a similar invitation has also been extended to other Specialist Clubs, as it is thought that only by this means can a thoroughly representative Show be obtained.

The Clubs participating would share the expenses, and profit or loss, and our Show Committee, who have very carefully considered the question, are unanimous in favour of accepting the invitation. They have, however. been advised that the Club is not in a position to risk the financial loss such a Show might possibly entail, and this being the case, they have decided to place the matter before the members, with the object of asking their assistance in forming a guarantee fund to safeguard the Club against monetary loss.

May I therefore ask members to give the matter their kind consideration and support? Promises of guarantee should be sent to me on or before the 10th of August next, stating the amount the member is willing to be responsible for. We want at least a guarantee of from £12 to £15, and if the amount reaches £20 so much the better.

I need hardly say, however, that we do not by any means anticipate a loss on the Show. On the contrary, we hope it will be the means of handing the Club a substantial surplus. It would certainly increase our status and position, and in all probability enable us to still further increase our membership.

In the event of an insufficient guarantee being the result of this appeal, there will be no choice for the Show Committee other than to decline the invitation.

J. A. Swan, *Hon. Exhibitional Secretary*,
87, Lower Kennington Lane, S.E.

The following amounts have already been guaranteed :—

	£	s.	d.
Mr. W. Oakey	0	10	0
Mr. J. A. Swan	0	10	0
Mr. S. M. Townsend	0	10	0
Mr. H. R. Fillmer	0	10	0
Mrs. Anningson	0	10	0
Mr. W. Osbaldeston	0	10	0

Since the above was written, I learn that the Show will be held on Dec. 8th, 9th, and 10th, at the Crystal Palace—the Mecca of all true exhibitors.

The British Bird Club has accepted the invitation to undertake the British Bird Section.

J. A. Swan.

LETTER TO THE MEMBERS.

In looking over the reports for the last year I notice the absence of any reference to the alterations the Show Committee thought fit to make in the method of awarding the Medals. It may be they thought the less said the soonest mended. They only say "we have been able to offer more for competition and we hope still further to extend the list, and the members can find the Medals granted and their respective winners by going through the Show reports."

I would suggest that they publish a list for last season, the same as on page 118 of *Bird Notes*.

I quite agree with "A Member" that a vote ought to be taken, but as the way of awarding Medals is not one of the rules of the Club, the members cannot bring Rule 7 into force. The Show Committee for the time being, with the sanction of the Council, have it all in their hands. I am looking forward to see the balance sheet for the last year—the last one was published in *Bird Notes* for June, 1902.

John Acutt.

The following is a list of the winners of the Medals granted last season, printed in compliance with the wish expressed above.

Norwich	Oct., 1902	*Silver*	Mr. F. J. Yallop.
,,	,,	*Bronze*	Mr. F. Howe.
Manchester	,,	,,	Mr. Osbaldeston.
Nottingham	Nov., 1902	,,	Mr. H. B. Smith.
Dublin	,,	,,	Mr. Andrew Philip.
Sligo	,,	,,	Mr. George Bell.
Aquarium	,,	*Silver*	Mr. Hawkins.
,,	,,	,,	Mr. Townsend.
,,	,,	*Bronze*	Dr. Hopkinson.
,,	,,	,,	Mrs. Cooper.
Cork	,,	,,	Mr. F. C. Porte.
Cambridge	Dec., 1902	,,	Mrs. Anningson.
Leicester	Jan., 1903	,,	Mr. W. Oakey.
St. Helens	,,	,,	*(not awarded)*.

The method of awarding our Medals for "most points" does not appear to be appreciated by some of our members, who seem to prefer that the honour should be won by the "best bird." Will therefore members record their vote in writing, stating which method they favour, to the Scrutineer, Mr. J. E. R. McDonagh, 13, Greencroft Gardens, South Hampstead, N. W., before Aug. 10th next. The result of the voting will be submitted to the Show Committee, and their decision announced in due course.

POST MORTEM EXAMINATIONS.

Dr. Creswell undertakes *post mortem* examinations for the members, upon the conditions mentioned below.

1. The dead birds *must* be sent to W. G. Creswell, Esq., M.D., F.Z.S., Eden Lodge, Kingston-on-Thames.
2. They must be sent *immediately* after death, in some sort of box, carriage paid.
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Supplementary Balance Sheet for the year ending 30th April, 1902.

Contributions to Deficit Fund per Mr. Swan	£7 0 7	Balance brought forward from last account	£7 0 7

Balance Sheet for the year ending 30th April, 1903.

Receipts.

	£	s.	d.
152 Members' Subscriptions at 5/-	38	0	0
4 Members' Subscriptions at 2/6	0	10	0
Sales of copies of "Bird Notes"	2	11	8
Sales of Cases for binding	2	12	1
Members' Advertisements	1	10	5
Trade Advertisements	5	6	0
N. B. B. & M. C's share of cost of printing "Bird Notes"	27	0	4
	£77	10	6

Expenditure.

	£	s.	d.
Printing "Bird Notes" (May 1902 to April 1903)	55	11	9
Postage	8	15	0
Medals (including engraving)	4	11	3
Blocks for illustrations in "Bird Notes" ..	1	15	6
Printing List of Members, Election Circulars, etc.	2	1	0
Cases for binding and Binder's charges ..	2	10	0
Advertising	0	9	6
Purchase of back numbers	0	5	0
Stationery, etc.	0	14	2
Prize *re* New Members..	0	10	6
Cheque Book	0	2	6
Balance in hand ..	0	4	4
	£77	10	6

Audited and found correct,

W. OSBALDESTON, *Hon. Treasurer.*

WILLIAM H. BETTS, *Hon. Auditor.*

18th July, 1903.

MEMORANDA FOR MEMBERS.

All subscriptions run from the 1st of May, and should be paid as soon as possible after that date—or, in the case of new members, as soon as possible after joining the Club.

All subscriptions should be sent to the Hon. Treasurer, the Hon. W. B. WROTTESLEY, 8, Herbert Crescent, S.W.

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THE BIRD MARKET.

The charge is one penny for every four words, including address. All advertisements must be pre-paid, and reach the Editorial Secretary by the 10th of the month.

Young Peach-faced Love-birds, sex unknown, 8/- each or offers. Wanted—a cock Rosella.

BROOKSBANK, Middleton Hall, Driffield, Yorkshire.

Am compelled through ill-health to sell two peach-faced green and blue Parrakeets in splendid plumage—must be bought for pets—will not live with other birds. Will accept £1 10/-, cost double. Perfect show birds.

Mrs. HEALEY. 18, Albert Road, Regents Park, N.W.

SEPTEMBER, 1903.

The Foreign Bird Club.

NOTICES TO MEMBERS.

I much regret to announce that Dr. Hopkinson has been compelled to resign his membership of the Council. He leaves Oxford at the end of this month, after which his movements will be uncertain for a time, and he will probably go abroad later in the year. But his interest in the Club will continue, wherever he resides—though he may be unable, through distance, to take an active part in its management.

If any members, who find that their copies of *Bird Notes* are damaged in the post, like to send me **6**d. in stamps, I will see that their Magazines are despatched with strawboard protection in future—up to the end of the current volume in February next. The charge of 6d. is necessary to defray the cost of the board and extra postage.

The Regulations, made by the Magazine Committee, as to the Medals offered for breeding new species, are printed below. Members will please bear in mind that the offer of these Medals is distinct from the "Breeding *Competition*," of which particulars appear on the first page of June "Notices to Members."

Will the members who avail themselves of Dr. Creswell's services for *post mortems*, please take note of the fact that Dr. Creswell cannot, *under any circumstances*, enter into correspondence with the forwarders of dead birds, unless the fee of **2/6** for a report by post is paid? He has been compelled by pressure of work to make this an invariable rule, and it applies equally to those members with whom he is acquainted as to those who are personally unknown to him.

Those members who have joined the Club this year, and who desire to have a complete set of *Bird Notes*, would do well to secure a copy of Vol. I. without delay, as the number of copies in stock is limited.

HORATIO R. FILLMER, *Hon. Editorial Secretary,*

14th Sept., 1903. 52, SHIP STREET, BRIGHTON.

Medals have been granted to the following Shows, in addition to those already announced:

Manchester. Oct. 30th and 31st. F. B. C. Classification for four classes. One Bronze Medal. Judge, Mr. Houlton.

Cambridge. Nov. . F. B. C. Classification for six classes. One Silver Medal, one Bronze. Judge, Mr. Camps.

Preston will have five classes instead of three, and have been granted a Silver Medal, in the place of the Bronze Medal as already announced.

Four members only took the opportunity of recording their votes on the method of awarding our Show Medals. All were in favour of " Best Bird." The Show Committee decided therefore that the Medals should continue to be awarded for " Most Points."

J. A. SWAN, *Hon. Exhibitional Secretary,*
87, Lower Kennington Lane, S.E.

NEW MEMBERS ELECTED.

Mrs. H. BEALE COLLINS, 18, Lingfield Avenue, Kingston-on-Thames.

G. H. CORDERY, 20, Fenwick Road, East Dulwich.

THOMAS SALT, L.R.C.P., Yiewsly, Saltley, Birmingham.

ALFRED HENRY CRESWELL, L.S.A., Cinderford, R.S.O., Gloucestershire.

C. W. WOODHOUSE, Portmore, Merton Road, Bedford.

HEBER J. MASON, Ashburn, Harrogate.

H. A. J. HUDSON, 16, Billington Road, New Cross. S.E.

W. H. BARKER, Norwood House, Clifton Road, Rugby.

Mrs. J. E. DAVIES, Granby Street, Littleport, Isle of Ely.

Mrs. JAMES HOWE, Moss Lodge, Ashton-under-Lynn, Lancashire.

A. C. SLATTER, 17, Commercial Street, Hereford.

FRANK FINN, B. A., F. Z. S., M. B. O. U., 29, Chalcot Crescent, Primrose Hill, N.W. (Mem. Avic. Society, introduced by Mr. GOODCHILD).

NEW MEMBERS PROPOSED.

WILLIAM HAWES, 21, Langdon Park Road, Highgate, N.
E. W. CHAPLIN, The Firs, Great Amwell, Herts.
Proposed by Mr. SWAN.

Miss BUSTEED, 32, Charleville Mansions, West Kensington, W.
Proposed by Mrs. MCADAM.

H. MITCHELL, Duchy Court, Harrogate.
Proposed by Mr. HOLLINS.

P. W. MUNN, Laverstack, Whitchurch.
Proposed by Mrs. BELFORD WILSON.

ALFRED WHEELER, 2, West View Terrace, Droitwich Road, Worcester. *Proposed by* Mr. FILLMER.

D. MACKIE, 33, Argyle Street, Ayr, Scotland.
Proposed by Mr. OSBALDESTON.

JAMES T. PORLEOUS, Tereholme, Hexham.
Proposed by Mr. PHILIP.

Rev. P. R. GORRINGE, Manston Rectory, Sturminster Newton, Dorset. *Proposed by the* Rev. R. E. P. GORRINGE.

ROBERT A. N. STANLEY, 40, Fairfield South, Kingston-on-THAMES.

W. P. PYCRAFT, British Museum (Nat. Hist.), Cromwell Road, S.W. *Proposed by* Dr. CRESWELL.

REGULATIONS AS TO THE AWARD OF THE MEDAL OFFERED FOR BREEDING NEW SPECIES.

1. The Medal shall be awarded to any member who successfully rears any species of foreign bird not previously bred in captivity in the United Kingdom.

2. The young must live to be entirely independent of their parents—which will, in the case of passerine birds, be assumed to be the case after the age of nine weeks.

3. The breeder must forward to the Editorial Secretary, within three months after the hatching, a detailed account of the nesting and rearing of the young, suitable for publication in *Bird Notes*.

4. The breeder shall make, in a prescribed form, a statutory declaration as to the truth of the facts stated in his account of the breeding. And such declaration shall be the property of the Club.

5. The Magazine Committee may, at their discretion, require such confirmation of the breeder's declaration as they think fit.

6. Not more than one Medal shall be awarded to any one member in the same year—but the Magazine Committee shall have power to waive this rule in any case in which they think fit to do so.

LETTER TO THE MEMBERS.

I daresay most of our members have seen a letter from Mr. Frostick in *Cage Birds* on the subject of awarding medals by points. I think it would have been a great deal better if he had written to our Magazine instead of taking the question outside.

Mr. Frostick says in his letter that the recent voting was overwhelmingly in favour of point prizes: as the few votes recorded were all in favour of the "best bird," this statement hardly sounds correct. S. M. TOWNSEND.

POST MORTEM EXAMINATIONS.

Dr. CRESWELL undertakes *post mortem* examinations for the members, upon the conditions mentioned below.

1. The dead birds *must* be sent to W. G. CRESWELL, Esq., M.D., F.Z.S., Eden Lodge, Kingston-on-Thames.
2. They must be sent *immediately* after death, in some sort of box, carriage paid.
3. Each body must be accompanied by as many details as possible as to *(a)* length of illness, *(b)* symptoms of illness, and *(c)* particulars as to lodgement and feeding, especially noting whether inga seed and egg food have been given.
4. The work will be done gratuitously unless a *letter* of report or advice is wished for. In this case a fee of 2s. 6d. must be sent. In all cases the report will be published in "Bird Notes," whether or not one has been privately sent to the owner of the bird.

BOUND COPIES OF VOL. I.

These can now be obtained from Mr. Fillmer, price 10/6 to members, 15/- to non-members, (post free).

THE BIRD MARKET.

The charge is one penny for every four words, including address. All advertisements must be pre-paid, and reach the Editorial Secretary by the 10th of the month.

Wanted—Nuthatch.
Mr. ACUTT, 114, Upland Road, East Dulwich, S.E.

Rowley's "Orinthological Miscellany." Three large volumes complete. Handsomely bound half morocco gilt tops. Profusely illustrated with fine coloured plates of birds. Price £3 3s.
HARMAN, 56, Tubbs Road, Harlesden, London, N.W.

NOVEMBER, 1903.

The Foreign Bird Club.

NOTICES TO MEMBERS.

Mr. W. P. Pycraft has been elected by the Council to fill the vacancy in their body caused by the resignation of Dr. Hopkinson. He has kindly undertaken to assist members in the identification of species—thus continuing Dr. Hopkinson's work. All queries on this subject should be addressed to Mr. PYCRAFT at the British Museum (Nat. Hist.), Cromwell Road, S.W. I feel sure that the members will highly appreciate the privilege of being able to consult an ornithologist of repute.

It is to be regretted that "The Bird Market" is not taken advantage of to a greater extent. *Bird Notes* has a circulation of over 400 copies per month, and this circulation is entirely among lovers of foreign and British birds, so that it should be an excellent medium for the disposal of surplus stock. Oddly enough, "The Bird Market" is less patronised now than is was nearly two years ago, when the circulation was very much smaller. Will members also bear in mind the fact that by sending their advertisements to our pages they will be helping the finances of the Club?

Meetings of the Council, and of the members, will be held at the Crystal Palace on Tuesday the 8th Debember. Place and times of meetings will be announced by notice on the Sales Office. Matters of great importance to the Club will be discussed.

HORATIO R. FILLMER, *Hon. Editorial Secretary,*
14th Nov., 1903. 52, SHIP STREET, BRIGHTON.

NEW MEMBERS ELECTED.

A. H. DESPREZ, 6, Holmwood Grove, Newcastle-on-Tyne.
A. P. DIXON, 45, Myrtle Grove, West Jesmond, Newcastle-on-Tyne.
W. ARMSTRONG, F.G.S., Cramlington, Northumberland.
GEORGE TYSON, Aelagh, Dalkey, Ireland.
T. WOOLSTON, 15, Southfield Road, Middlesborough.

Evan James Creswell, 4, West Avenue Road, Walthamstow.

Mrs. E. M. **Butler**, 30, Sutton Court Road, Chiswick, W.

Chas. H. C. Pengelley, Bridge House, Holywell, St. Ives, Hunts.

Mrs. **Skidmore**, The Bank House, Ascot.

Mrs. G. W. **Moore**, Moore House, Finchley Road, St. John's Wood.

David Seth-Smith, F.Z.S., M.B.O.U., 14, Canning Road, Addiscombe. (Mem. Avic. Society, introduced by Mr. **Fillmer**).

Mrs. **Henry Bromet**, Highfield, Tadcaster.
(Mem. Avic. Society, introduced by Mr. **Fillmer**).

C. S. **Cockburn**, Sutton Rock, Chesterfield.
(Mem. Avic. Society, introduced by Mr. **Fillmer**).

The Very Rev. Canon **Vere**, 21a, Soho Square, W.
(Mem. Avic. Society, introduced by Mr. **Swan**).

William Young, Taw Vale, Barnstaple. (Mem. Avic. Society, introduced by Mr. **Bullock-Webster**).

NEW MEMBERS PROPOSED.

Lord **Decies**, Beresford Lodge, Birchington.
The Lady **Decies**, Beresford Lodge, Birchington.
Proposed by Mr. **Townsend**.

J. A. **Restall**, 82, Cambridge Street, Birmingham.
Charles E. Pantin, Heathdene, Vanbrugh Park Road East, Blackheath.
T. J. **Martin**, High Street, Lowestoft.
Miss **Beatrice Castang**, 36, Coram Street, Russell Square, W.C.
Proposed by Mr. **Swan**.

Dr. G. **Master**, 86, Guildhall Street, Bury St. Edmunds.
Proposed by Mr. **Cattle**.

Miss E. **Harton**, 53, Goldhurst Terrace, S. Hampstead.
Proposed by Miss C. L. **Collier**.

Mr. **John D. Hamlyn**, of 221, St. George's Street East, London, E., has resigned his membership of the Club, and his resignation has been accepted by the Council.

OUR FOREIGN BIRD SHOW.

All arrangements are now complete for our forthcoming Show, and full particulars, together with advantages and privileges to members, will be found in the Schedule.

I hope members will endeavour to send as many entries as possible and so make our Section a great success.

A meeting of the members will be held at the Crystal Palace on the first day of the Show, and we hope all who can will attend. The time and place will be posted on the Show Secretary's Office.

Medals have been granted to the following Shows, in addition to those already announced:

Cork—November 25th and 26th. Classification approved for Three Classes. One Bronze Medal. Judge: Mr. Swaysland.

Bury—December 10th and 11th. Classification approved for Four Classes. One Bronze Medal. Judge: Mr. Yallop.

Market Harborough—January 14th and 15th. One Bronze Medal. Judge: Mr. Hills.

J. A. Swan, *Hon. Exhibitional Secretary*,
87. Lower Kennington Lane, London, S.E.

◆

BOUND COPIES OF VOL. I.

These can be obtained from Mr. Fillmer, price 10/6 to members, 15/- to non-members, (post free).

◆

POST-MORTEM EXAMINATIONS.

The conditions upon which these will be made by Dr. Creswell, Eden Lodge, Kingston-on-Thames, are as follows·

(1) The birds must be sent IMMEDIATELY after death.

(2) They *must* be packed in a box.

(3) The letter accompanying them must *not* be placed in the box along with the birds.

(N.B. Unless the above conditions are complied with the package will be destroyed without examination).

(4) The letter must detail *as far as possible* all particulars as to (*a*) date of death,

(*b*) length of illness,
(*c*) symptoms of illness,
(*d*) lodgement and feeding of birds, and
(*e*) especially as to whether egg food or inga seed have been given.

(5) The work will be done gratuitously, and a report published in "Bird Notes," but *under no circumstances whatever will either advice or report be sent by post unless a fee of* 2/6 *accompanies the letter and bird.* Pressure of work compels Dr. Creswell to make this an invariable rule, and it applies to all members whether they are personally acquainted with him or not.

THE BIRD MARKET.

The charge is one penny for every four words, including address. All advertisements must be pre-paid, and reach the Editorial Secretary by the 10th of the month.

Splendid lot of 14 box cages in beautifully made rack. cost 10 gns., take 50/-. Also several aviaries. Letter.
Dr. Snell, Wandsworth Common, S.W.

Cock Gould 12/6, pair Long-tailed Grassfinches 15/-, Two Paradise Whydahs 5/-, Seven Zebra Finches 10/-. All from outdoor aviary.
A. Bullock-Webster, King's Close, Barnstaple.

Acclimatised, from outdoor aviary—Blue and Yellow Macaw, pairs magnificent adult Silver Pheasants, White Java Doves, Java Sparrows, hen Green Cardinals, odd cocks Gold Pheasant, Grey Cardinal, Goldfinch-Canary mule, Grenadier, Orange and Textor Weavers in colour. Cheap to clear. Particulars. George Moss, Loughborough.

Wanted: *Cocks*, Wild Canary, St. Helena and Sulphur Seed-eaters, Grey and Green Singing Finches, Serin Finch.

For Sale: Cock Ribbon Finch, pair Indigoes, hen Orange Bishop, hen White Java, ditto Grey, extra large buff Norwich cock. All wintered in exposed outdoor aviaries. Dr. Creswell.

The Foreign Bird Club.

NOTICES TO MEMBERS.

The partnership with the British Bird Club in the ownership of *Bird Notes* has been put to an end, and the Magazine is now under the sole control of our own Club.

IMPORTANT ANNOUNCEMENT.

SPECIAL attention is directed to the Amended Rules which appear on another page. These have been under the consideration of the Council for some months past and have been passed in their present form after full discussion. They are here presented for the approval of the members, and if any six members object, it is open for them, under No. 7 of our existing rules, to require the new rules to be submitted to the votes of the members.

The chief alterations effected by the new rules are as follows:

> The Club will be divided into "Members" and "Associates." Members will pay an annual subscription of 10/-, Associates an annual subscription of 6/-. Only members will be eligible for election to office, and they alone will possess the right of voting—in other words, the management of the Club will be in the hands of the members alone.
>
> It is intended to issue, with the Magazine next year, at least four hand-coloured plates to *members only*. Similar plates will be issued with the copies supplied to associates, but *uncoloured*. After next year, it is hoped that these coloured plates may be issued each month—but the intention is always to restrict their issue to members only. All the other advantages of the Club at present enjoyed by members will be open to members and associates equally.
>
> An entrance fee of 2/6 will be charged to both members and associates.
>
> Dealers in birds are excluded from all offices in the Club except that of Judge.
>
> The date of the commencement of the Club's year is altered to the 1st of March.

The increased subscription and the entrance fee will not come into force until the commencement of the next year of the Club (*the* 1st *of March next*).

A post card accompanies this issue of *Bird Notes*—members will greatly oblige by filling up this and returning it to me at once. All members must make their election as to whether they will in future be members or associates. It is hoped that a large majority will decide to pay the higher subscription.

The coloured plates will be hand-coloured lithographs of the best quality, reproduced from drawings by professional artists of repute. They will resemble, and be fully equal to, the coloured plates in the *Ibis* and the *Avicultural Magazine.* The plates supplied to associates will be lithographs from the same stone, but *uncoloured.*

With the view of making all our members acquainted with the nature of the coloured plates to be issued next year, Dr. Creswell has started a subscription for a coloured plate to appear in our February issue (the last of the current volume). This plate will be a reproduction of a drawing by Mr. Goodchild of one of the most admired prize-winners at the recent Palace Show. It will be issued as a *coloured* plate, with *all* the copies of the February magazine. The following is a list of the subscriptions already paid or promised—about £5 more is required, which must be subscribed before Christmas if the plate is to appear—as otherwise there will not be time for the colouring to be done before February. Contributions to this fund will be gratefully received by Dr. Creswell, the Treasurer, or either of the Hon. Secretaries.

	£	s.	d.
Mr. L. W. Horton	1	1	0
Dr. R. H. Clarke	1	1	0
Dr. W. G. Creswell	1	1	0
Mr. H. Dart	0	5	0
Dr. E. Hopkinson	0	10	0
Mr. T. H. Newman	1	1	0
	£4	19	0

Dr. Hopkinson is leaving on the 16th inst. for West Africa, to take up the post of Protectorate Medical Officer in Gambia. His address will be simply " Gambia, West Africa." He hopes to return to England next Summer.

HORATIO R. FILLMER, *Hon. Editorial Secretary,*
14th Dec., 1903. 52, SHIP STREET, BRIGHTON.

NEW MEMBERS ELECTED.

Lord Decies, Beresford Lodge, Birchington.
The Lady Decies, Beresford Lodge, Birchington.
J. A. Restall, 82, Cambridge Street, Birmingham.
Charles E. Pantin, Heathdene, Vanbrugh Park Road East. Blackheath.
T. J. Martin, High Street, Lowestoft.
Miss Beatrice Castang, 36, Coram Street, Russell Square, W.C.
Dr. G. Master, 86, Guildhall Street, Bury St. Edmunds.
Miss E. Harton, 53. Goldhurst Terrace, S. Hampstead.
R. Suggitt, Suggitt's Lane, Cleethorpes. (Mem. Avic. Society).
Mrs. Fagg-Elliott, Staindrop, Darlington. (Mem. Avic. Society).
W. A. Harding, F.Z.S., Histon Manor, Cambs. (Mem. Avic. Society).

NEW MEMBERS PROPOSED.

Reginald D. Steward, 6, Stanger Rd., South Norwood, S.E.
Mrs. J. Ross Divett, Newby, Salisbury Road, Southsea.
T. H. Whittaker, Ravensmere, North Drive, St. Anne's-on-the-Sea.
Mrs. Reginald Watts, Filham House, Ivybridge, South Devon.
Proposed by Mr. Swan.

Mrs. V. Stacy-Marks, Westbury, BerrylandsRoad, Surbiton.
Mrs. Marshall, Ashley Warren, Walton-on-Thames.
Proposed by Dr. Creswell.

Captn. G. F. Perrean. 2/4 Gurkha Rifles, Bakloh, Punjab, India.
Harry C. Oberholser, 1454, Sheridan Avenue, Washington, D.C., U.S.A.
Proposed by Mr. Fillmer.

Miss Beatrice Butler, Han's Crescent Hotel, Sloane Street, London, S.W.
Proposed by the Hon. W. B. Wrottesley.

H. B. Wilson, Angleham, Rosebery Crescent, Newcastle-on-Tyne. *Proposed by* Mr. Philip.
Miss Annette Travers, St. Cloud, Beaupare, co. Meath.
Proposed by Mr. Porte.

NEW RULES.

1. The objects of "THE FOREIGN BIRD CLUB" shall be the mutual encouragement and assistance of the members and associates in the keeping, breeding, and exhibiting of foreign birds, and the improvement of Shows in regard to them.

2. The Club shall be composed of members and associates. Every member shall pay an entrance fee of 2/6 and an annual subscription of 10/-. Every associate shall pay an entrance fee of 2/6 and an annual subscription of 6/-. Associates shall have such of the privileges of members as the Council shall from time to time direct. Subscriptions shall be due and payable in advance on the 1st of March in each year. If any member's or associate's subscription shall be more than three months overdue he shall be suspended from all the benefits of the Club, and if more than nine months overdue notice of his having ceased to be a member or associate of the Club, and of the cause, may be published in the Notices to Members; and on such notice being published he shall cease to be a member or associate accordingly, but his liability for the overdue subscription shall continue.

3. New members shall be proposed in writing by a member of the Club and new associates by either a member or an associate: and the name and address of every person thus proposed, with the name of the person proposing him, shall be published in the Notices to Members. Unless the candidate shall, within fourteen days after the publication of his name, be objected to by at least two members, he shall be duly elected. If two or more members lodge with either of the Secretaries objections to any candidate he shall not be elected, but the signature to the signed objections must be verified by the Scrutineer. The Secretaries and the Scrutineer shall not disclose the names of the objectors. Associates desiring to become members shall go through the same form of election as other candidates but shall not pay an entrance fee.

4. Any member or associate wishing to resign at the end of the current year of the Club shall give notice of his intention to one of the Secretaries before the 1st of February, and in default of such notice he shall be liable for the following year's subscription.

5. The officers of the Club shall be elected from the members and shall consist of a President, one or more Vice-Presidents, an Auditor, a Scrutineer, one or more Secretaries, a Treasurer, a Council of twelve members, and such number of Judges as shall from time to time be determined by the Council. The Secretary or Secretaries and the Treasurer shall be ex-officio members of the Council. The Secretary or Secretaries, the Treasurer, the Council, and the Judges shall be elected annually by the members in manner hereinafter provided. The other officers shall be elected annually by the Council immediately after their own election.

6. The election of the Secretary or Secretaries, Treasurer, Council, and Judges shall take place every year between the 15th of January and the 5th of February. The Secretaries shall ascertain which of the members are willing to stand for election to office, and shall send to each member of the Club, on or about the 15th of January, a voting paper containing a list of all such members, showing the offices for which they are respectively seeking election. Each member shall make a cross (X) opposite the names of those for whom he desires to vote, and shall sign the paper at the foot and send it in a sealed envelope to the Scrutineer, so that he may receive it before the 5th of February. The Scrutineer shall prepare a return of the officers elected, showing the number of votes recorded for each candidate, and send it to one of the Secretaries for publication in the Notices to Members for February. The Scrutineer shall not reveal to any person how any member shall have voted. In the event of an equality of votes the President shall have a casting vote.

7. Dealers in birds shall not be eligible for election to any office in the Club, except that of Judge. For the purpose of this rule any member who habitually buys birds with the intention of selling them again shall be deemed a dealer in birds. Before the annual election of officers the Secretaries shall submit to the Council the list of members willing to stand for election to the Secretaryship, the Treasurership, and the Council, and the Council shall remove from the list the name of any candidate who shall be, in the opinion of the Council, a dealer in birds within the meaning of this rule. The decision of the Council, or of any Committee to whom the Council shall delegate its powers under this rule, shall be final. When a dealer is proposed as a member of the Club, the fact of his being a dealer shall be stated in the Notices to Members.

8. It shall be lawful for the Council to delegate any of its powers to a Committee.

9. The Council may appoint an Arbitration Committee which may decide questions at issue between members and associates when requested to do so by both parties. Any decision of such Committee shall be final. Except to the extent permitted by this rule, the Club and its officers shall decline to concern themselves with disputes between members.

10. The Council shall have power to alter and add to the Rules, but shall give to the members notice of any proposed alteration or addition, and in the event of six members objecting thereto within fourteen days the proposed alteration or addition shall be submitted to the votes of the members. Failing such objection the alteration or addition shall date from its adoption by the Council.

11. The Council shall have power to expel any member or associate at any time.

12. Neither the office of Scrutineer nor that of Auditor shall be held for two consecutive years by the same person. The Scrutineer shall not be a candidate at any election at which he acts as Scrutineer.

13. If any office become vacant at any time other than at the end of the current year of the Club, the Council shall have power to nominate any member to fill the vacancy.

14. The decision of the majority of the Council shall be final and binding on the Club, but a resolutiou passed by the Council shall not be acted upon unless there be an absolute majority of the Council (and not merely of those voting) in its favour.

POST-MORTEM EXAMINATIONS.

The conditions upon which these will be made by Dr. CRESWELL, Eden Lodge, Kingston-on-Thames, are as follows.

(1) The birds must be sent IMMEDIATELY after death.

(2) They *must* be packed in a box.

(3) *The letter accompanying them must* NOT *be placed in the box along with the birds.*

(N.B. Unless the above conditions are complied with the package will be destroyed without examination).

(4) The letter must detail *as far as possible* all particulars as to (*a*) date of death,
(*b*) length of illness,
(*c*) symptoms of illness,
(*d*) lodgement and feeding of birds, and
(*e*) especially as to whether egg food or inga seed has been given.

(5) The work will be done gratuitously, and a report published in "Bird Notes," but *under no circumstances whatever will either advice or report be sent by post unless a fee of* 2/6 *accompanies the letter and bird.* Pressure of work compels Dr. Creswell to make this an invariable rule, and it applies to all members whether they are personally acquainted with him or not.

MEMORANDA FOR MEMBERS.

All subscriptions should be sent to the Hon. Treasurer, the Hon. W. B. WROTTESLEY, 8, Herbert Crescent, S.W.

All dead birds for *post mortem* examinations should be sent to Dr. CRESWELL, Eden Lodge, Kingston-on-Thames.

All queries as to the names or identification of birds should be sent to W. P. PYCRAFT, Esq., British Museum (Nat. Hist.), Cromwell Road, London, S.W.

All MSS. for publication in "Bird Notes," queries as to treatment of birds, advertisements for "The Bird Market," and orders for back numbers or extra copies of "Bird Notes," should be sent to H. R. FILLMER, 52, Ship Street, Brighton.

All other communications should be sent to J. A. SWAN, 87, Lower Kennington Lane, S.E.

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These can be obtained from Mr. Fillmer, price 10/6 to members, 15/- to non-members, (post free).

THE BIRD MARKET.

The charge is one penny for every four words, including address. All advertisements must be pre-paid, and reach the Editorial Secretary by the 10th of the month.

Pair aviary-bred Silver and Golden Pheasants, 1903, just coming into colour, 21/- pair.
The Lady DUNLEATH, Ballywalter Park, co. Down.

Cock Cockatiel 6/-, 1 cock 2 hen Ribbon-finches 6/-, pair Silver Bills 4/-, pair Zebra 6/-.—All aviary-bred. Silky Cowbird 5/-.
A. R. BIDE, Highlands, Farnham.

Wanted—Pair White Storks, to turn out in garden.
PHILIP MUNN, Laverstoke, Whitchurch, Hants.

The Foreign Bird Club.

NOTICES TO MEMBERS.

IT is with very great regret that I have to announce the retirement of Mr. SWAN from the office of Hon. Secretary at the end of the Club's year (29th February next). Mr. Swan has been obliged to take this step through ill-health. His loss is irreparable, as it would be impossible to find a successor who would bring to the work an equal fund of energy and enthusiasm — but in Mr. TOWNSEND, who has kindly allowed himself to be persuaded to come forward as a candidate for the vacant post of Exhibitional Secretary, we shall have, if he is elected, an officer of great experience in all matters relating to Shows, and a worthy successor to Mr. Swan. Mr. Townsend wishes to confine himself entirely to the work of the Show Department, and would therefore be "Hon. Exhibitional Secretary" simply, and not "Exhibitional *and General* Secretary," like Mr. Swan.

The Council has carried unanimously a hearty vote of thanks to Messrs. Swan and Townsend for their successful management of the foreign bird section at the recent Crystal Palace Show.

I regret that there has been some misapprehension about the entrance fee. I should like, therefore, to make it quite plain that this will be charged *only* to members and associates who join the Club *for the first time* after the 1st of March next, and that none who now belong to the Club will be asked to pay it.

I have now received replies from a large number belonging to the Club, and have enrolled the names of considerably over 100 who elect to continue as full members, and of some 25 associates. But there are still nearly half the members who have not returned the post cards sent them. I should be much obliged if they would do so forthwith.

The following further donations towards the coloured plate, which is to appear next month, have been received:

Already acknowledged	4	19	0
Mr. J. W. Tidey	1	1	0
The Hon. W. B. Wrottesley	0	10	0
Mr. Mathias	0	5	0
Mr. Acutt	0	2	6
Mr. Harman	0	2	6
	£7	0	0

I should be very glad to receive further contributions to make up the small balance required.

With this issue of *Bird Notes* each member should receive a voting paper for the election of the Council etc., and an envelope in which to forward it to the Scrutineer. If any members should fail to receive this voting paper will they please apply to me for one at once?

The Scrutineer is J. E. R. McDONAGH, Esq., 13, Greencroft Gardens, S. Hampstead, N.W., and he must receive the voting papers before the 5th of February. *The paper must be signed.*

Less than six objections having been lodged against the new Rules, they have now come into force. Members would save much correspondence, to themselves and the officers of the Club, if they would *read* the Rules.

I regret that owing to our space this month being so largely occupied with Show Reports, much interesting matter has been held over until next month.

HORATIO R. FILLMER, *Hon. Editorial Secretary,*
15th Jan., 1904. 52, SHIP STREET, BRIGHTON.

I regret that the following was omitted from our November issue. It is now inserted for the purpose of future reference.

Amalgamated Show (*Crystal Palace*). Dec. 8th, 9th, and 10th, 1903. Special Classification for sixteen classes 2 silver and 4 bronze medals. Judges: Messrs. Camps, Fillmer, and Humphrys.

Medals have been granted to the following Shows in addition to those already announced:

St. Helens. Jan. 15th and 16th. Club Classification for three classes. One bronze medal. Judge: Mr. Houlton.

L. & P. O. S. (*Crystal Palace*). Jan. 29th and 30th, and Feb. 1st and 2nd. Classificaiion approved for eight classes. One silver and one bronze medal. Judges: Messrs. Camps, Humphrys and Swaysland.

J. A. SWAN, *Hon. Exhibitional Secretary,*
87. LOWER KENNINGTON LANE, LONDON, S.E.

⁂ The Hon. Secretaries wish to take the opportunity of sincerely thanking the numerous members who sent them the season's greetings, and heartily reciprocate the kind wishes expressed.

NEW MEMBERS ELECTED.

Reginald D. Steward, 6, Stanger Rd., South Norwood, S.E.
Mrs. J. Ross Divett, Newby, Salisbury Road, Southsea.
T. H. Whittaker, Ravensmere, North Drive, St. Anne's-on-the-Sea.
Mrs. Reginald Watts, Filham House, Ivybridge, South Devon.
Mrs. V. Stacy-Marks, Westbury, Berrylands Road, Surbiton.
Mrs. Marshall, Ashley Warren, Walton-on-Thames.
Capt. G. F. Perrean. 2/4 Gurkha Rifles, Bakloh, Punjab, India.
Harry C. Oberholser, 1454, Sheridan Avenue, Washington, D.C., U.S.A.
H. B. Wilson, Anglehan, Rosebery Crescent, Newcastle-on-Tyne.
Miss Annette Travers, St. Cloud, Beaupare, co. Meath.
D. S. Morse, Bank of Ireland, Mount Bellew, Ireland. (Mem. Avic. Society).
J. Lewis Bonhote, M.A., F.Z.S., M.B.O.U., Ditton Hall, Fen Ditton, Cambs. (Mem. Avic. Society, introduced by Dr. Creswell).
Robert Service, Maxwelltown, Dumfries (Mem. Avic. Soc).

NEW ASSOCIATE ELECTED.

Miss Beatrice Butler, Han's Crescent Hotel, Sloane Street, London, S.W.

PROPOSED FOR ELECTION AS MEMBERS.

Jas. Sim Wallace, D.Sc., M.D., C.M., 30a, Wimpole Street, London, W.;
W. Webb, Selwyn House. Brown's Road, Surbiton.
Proposed by Dr. Creswell.
Mrs. Harold E. Dennis, Warrenhurst, Itchingfield, Sussex.
Proposed by Mrs. Mortimer.
Mrs. K. Leslie Miller. 27, Belgrave Road, S.W.
Proposed by Mr. Swan.
Dr. McMath, 6. Camden Place, Cork.
Proposed by Mr. Swaysland.
Septimus Perkins, 50, Cavendish Place, Eastbourne.
Proposed by Mr. Quin.
Charles Buxton. 39, Harrington Street, Cleethorpes.
Proposed by Mr. Suggett.
J. Bramley, 2, Beach Grove, Harrogate.
Proposed by Mr. Fillmer.

PROPOSED FOR ELECTION AS ASSOCIATES.

W. J. Heutsch, Douglas Villa, Acacia Grove, New Malden, Surrey;
Geo. W. Moxon, Bretton West, Wakefield.
Proposed by Dr. Creswell.

THE BIRD MARKET.

The charge is one penny for every four words, including address. All advertisements must be pre-paid, and reach the Editorial Secretary by the 10th of the month.

Reducing ontdoor aviary—Pair Bengalese 5/6; cocks Bronze Mannikin, Zebra Waxbill, Bengalese, 3/- each; pair Pekin Robins in perfect feather, 15/6; cock Bronze Mannikin-Bengalee hybrid in show form, 4/-; cock Goldfinch mule, 7/6. The above are acclimatized and in good health.

Mrs. Dutton, Bank Cottage, Walton Stone, Staffs.

POST-MORTEM EXAMINATIONS.

The conditions upon which these will be made by Dr. Creswell, Eden Lodge, Kingston-on-Thames, are as follows.

(1) The birds must be sent IMMEDIATELY after death.

(2) They *must* be packed in a box.

(3) *The letter accompanying them must* NOT *be placed in the box along with the birds.*

(N.B. Unless the above conditions are complied with the package will be destroyed without examination).

(4) The letter must detail *as far as possible* all particulars as to (*a*) date of death,
(*b*) length of illness,
(*c*) symptoms of illness,
(*d*) lodgement and feeding of birds, and
(*e*) especially as to whether egg food or inga seed has been given.

(5) The work will be done gratuitously, and a report published in "Bird Notes," but *under no circumstances whatever will either advice or report be sent by post unless a fee of* 2/6 *accompanies the letter and bird.* Pressure of work compels Dr. Creswell to make this an invariable rule, and it applies to all members whether they are personally acquainted with him or not.

BOUND COPIES OF VOL. I.

These can be obtained from Mr. Fillmer, price 10/6 to members, 15/- to non-members, (post free).

National British Bird and Mule Club.

A Committee Meeting of the above Club held at Headquarters, 215, High Holborn, 31st April, 1903.

Present: Mr. Robson (Chairman), Mr. Pollard (Vice-Chairman), Messrs. Sandy, Trower, Hazell, Dewhurst, Vale, Frostick, A. Jones. C. Cooper, Maxwell, Dickery, A. Plumbridge, and the Hon. Sec. The minutes of previous meeting were read and confirmed. Letters were read from Mr. Bailey Mr. Houlton, and Messrs. Douglas and Stewart.

The application of Whitehaven Show for support was again considered, and their queries *in re* Judges. The Hon. Sec. was requested to explain the position. Mr. Emms, one of the elected Committee, wishing to retire, another gentleman will be asked to join.

It was proposed and seconded that a vote of condolence be sent to Mrs. Ball in her great bereavement. Mr. Robson, in a short speech, appropriately referred to the great efforts of our late member on behalf of this Club, always having in view the whole heartiness with which he had always tried to uphold the Club's work and had used his best influence and help to advance the interests of the Club, many members testifying and endorsing the Chairman's remarks. It was also proposed and seconded that members be asked to send a small contribution to a proposed "In Memoriam" to the late Mr. Ball (see notice). A vote of thanks to the Chairman, and the meeting closed.

Owing to an oversight I omitted to include in my annual report the list of elected Judges for 1903, and to unforseen delay in sending out rule books, which contain them also. I print them here for the benefit of members who may be specially interested:—

British Birds.	*Hybrids.*
Mr. J. F. Dewar	Mr. W. H. Vale.
,, J. Frostick.	,, J. F. Dewar.
,, W. H. Vale.	,, J. Williams.
,, S. H. Mays.	,, C. Houlton.
,, C. Houlton.	,, D. Bell.
,, W. Swaysland.	,, W. Swaysland.

I much regret having omitted Mr. Judd's name from the list of winners of Gold Medals in my annual report, he having won one at last Hull Show.

The Members of the N. B. B. & M. Club will all have heard of the death of our late esteemed member, Mr. Peregrine Ball. It was decided at the last Committee Meeting that I send, in the name of the Committee and the members of the Club in general, a vote of condolence to Mrs. Ball upon her sad bereavement. It was thought that the many conscientious services rendered by our late member to the Club could not be more fittingly recognised than by a framed "In Memoriam" parchment to be presented with the hearfelt regrets of the Club to Mrs. Ball, and I hope to hear from every member of the Club, that he or she will subscribe to this, the only expression we can offer of the esteem with which our late member was regarded by all who knew him. The subscriptions will be limited to one shilling, as it is intended that the memorial shall be an expression of feeling from every member of the Club.

W. A. LOTT, *Hon. Sec.*,
NATIONAL BRITISH BIRD & MULE CLUB,
103, CHEAPSIDE, LONDON, E. C.

Just as I am going to press I have received the letter as below from our Chairman, and can say I shall have great pleasure in forwarding the movement as much as possible :—

ANNUAL OUTING.

To the Members of the N. B. B. & M. C.

It will be remembered that an annual outing was inaugurated by the London and Suburban members last year, for the purpose of giving those who do not live within the range of rural life an opportunity of studying the habits and customs of the various wild birds (which afford such pleasure to hundreds of fanciers in their homes after the toil of their day's labour is over) in their various wild haunts during the breeding season. The ramble was much enjoyed by the party, the expressed wish of all being that it should become an annual event. There was only one drawback to the event last year,—it was just a month too late, hence my calling attention to the fact that it should have our attention at once, and a Saturday afternoon arranged for early in June, which would put many advantages before us in bird life, which we were deprived of last year, through being much later. If members would kindly intimate their views on the matter, and their willingness to attend the outing, by letter to the Secretary, Mr. Lott, before the next meeting, no doubt definite arrangements would then be made. The larger the company the more delightful it will be, as well as making the outing come more reasonable to all.

JOHN ROBSON, *Chairman*, N. B. B. & M. C.

NEW MEMBERS.

Mr. GAVIN ALSTON, Yonder Croft, Darvel, Ayrshire.
Pro. by Mr. J. H. Adams. Sec. by Mr. W. A. Lott.

Mr. ARTHUR JONES, 17, Strand Street, Mountain Ash, Glamorganshire. Pro. by Mr. C. Cooper. Sec. by Mr. C. T. Maxwell.

Mr. B. M. LEDWITH, Victoria House, Oswestry.
Pro. by Mr. Gough. Sec. by Mr. W. A. Lott.

Miss CRADDOCK, 21, Cotlands Road, Bournemouth.
Pro. by Mr. W. A. Lott. Sec. by Mr. Fulljames.

National British Bird and Mule Club.

Committee Meeting of the above Club held at Headquarters, 25, High Holborn, 24th September, 1903.

Present: Mr. Robson (Chairman), and Messrs. Sandy, Hathaway, Vale, Trower, Tolhurst, A. Jones, C. Cooper, Maxwell, Turnber, Frostick, Urch, Dewhurst, Morgan, A. Plumbridge, and the Hon. Sec.

The minutes of the previous meeting were read and confirmed.

Letters were read from Sir William Ingram, Bart., Mr. Osbaldeston, Mr. Weston, Mr. W. Pierce-Williams, Mr. Goodall, Mr. Munro, Mr. Berry, Mr. R. J. Howe, Mr. Perkins, Mr. Lythgoe, Mr. Samuel, Mr. Tighe, and Mr. Stringer.

The Hon. Sec. read the report of the Show Sub-Committee, which was approved, after one or two queries had been answered.

Regarding the letter of Mr. W. Pierce-Williams, of Llandudno, in *re* the conditions and purchasing of two Silver Challenge Cups. After considerable discussion it was proposed by Mr. Trower, and seconded by Mr. Vale, that the Club should purchase the cups. It was proposed by Mr. Trower, and seconded by Mr. Vale, that a small Sub-Committee be formed for the purchase of same (carried), and Messrs. Maxwell, Robson, and the Hon. Sec. be deputed to purchase the same.

It was proposed by Mr. Dewhurst, seconded by Mr. Jones, and carried, that one cup be put up for competition in the Hybrid Section and one in the British Bird Section.

Further discussion was held upon Mr. W. Pierce-Williams' suggested conditions and as to the way in which the cups should be competed for. Mr. W. Pearce-Williams leaving the final decision to the Committee, and after careful consideration it was proposed by Mr. Sandy, and seconded by Mr. Dewhurst, that the cups should be given for the best bird in each section. Mr. Jones moved an amendment that one cup be given for the best bird in the Hybrid Section, and the other for most points in the British Bird Section, seconded by Mr. Frostick and carried. It was also agreed that the cups be won three times, not necessarily in succession before becoming the property of the winner.

The application of the Preston Ornithological Society for Gold Medal and support was granted, on the proposition of Mr. Tolhurst and seconded by Mr. Sandy.

The Manchester and Northern Counties Ornithological Society submitted their classification, which was approved.

The application of the Wrexham Show was considered, but so few particulars being given was laid on the table.

The application of the Sligo Cage Bird Society could not be entertained.

The application of the P. and S. O. Society was adjourned till next meeting.

Some discussion took place upon a letter from Mr. Weston, and it was agreed to consider the same later on.

On the proposition of Mr. Vale, seconded by Mr. Dewhurst, a hearty vote of thanks was accorded to Sir William Ingram, Bart., for his generous donation to the Club. It was agreed that the donation should go to the general fund of the Club.

Six new members were elected.

The classification for the great Amalgamated Show was agreed upon, with the following additional Classes for the Hybrids:—Siskin and Canary Hybrid, Greenfinch and Canary, dark yellow and dark buff Goldfinch and Canary Hybrids. In the British Section, hen Bullfinch, Reed Bunting, and pairs matched for Hybrid Breeding Classes, were added. It was also agreed that a Continental Class be added for species of birds not on the National British Bird and Mule Club's list.

The Committee adjourned till the 1st October. The gentlemen then present being Mr. Robson (Chairman), and Messrs. Morgan, Tolhurst, Jones, Fulljames, Dewhurst, Maxwell, A. Plumbridge. Trower, and the Hon. Secretary. Letters were read from Messrs. Sandy, Urch, Vale, and Pollard.

The election of Judges for the Show was next for decision, and it was proposed by Mr. Tolhurst, and seconded by Mr. Jones, that three Judges be elected, one for Hybrids and two for British Birds. Carried.

It was proposed by Mr. Fulljames, and seconded by Mr. Tolhurst, that the Judges be elected by ballot. Carried unanimously. The result of the balloting was as follows :—

Mr. Vale for all Hybrids, Mr. Dewar for Hard-bills, and Mr Frostick for Insectivorous Classes.

It was proposed by Mr. Maxwell, and seconded by Mr. Tolhurst, that four Gold Medals and four Silver Medals be given, one Gold and one Silver be given in each Section, and one Gold and one Silver for any member who has never won a medal of the Club. Carried.

It was proposed by the Hon. Secretary that Mr. Tolhurst be Hon. Show Secretary to the Amalgamated Show, seconded by Mr. Maxwell, and Mr. Tolhurst consenting, was carried.

Proposed by Mr. Fulljames, and seconded by Mr. Trower, a vote of thanks be given to Mr. Tolhurst was carried. A vote of thanks was passed to the Chairman.

W. A. LOTT, *Hon. Sec.*,
NATIONAL BRITISH BIRD & MULE CLUB,
103, CHEAPSIDE, LONDON, E. C.

◆

TO THE MEMBERS OF THE NATIONAL BRITISH BIRD AND MULE CLUB.

IMPORTANT.

As a result of our arduous meetings you will notice below the extended classification in the Hybrid and British Bird Sections at the forthcoming great Amalgamated Show at the Crystal Palace in December next.

I need hardly point out to you the importance of this event in the history of the National British Bird and Mule Club of such a great Show and its undertakings, but also to the splendid classification in all the sections under our supervision. If my memory serves me well, it is the biggest classification ever given, and perhaps ever likely to be given at any one Show or any individual Club or Society. As you will notice, we have no less than 13 classes for Hybrids and 27 Classes for British Birds, surely a huge programme. Although the call for a small guarantee fund has not been responded to with any success whatever outside your Committee, I am consoling myself upon the encouragement we have given the members to respond beyond our expectations in the matter of entries, for it is to our own Club's benefit, to our own Club's influence, and to our own Club's finance. Although an open Show, our own members should at least be responsible for 600 or 700 entries. You will also note by the generosity of two members of the Club, three five guinea Challenge Cups are offered for the first time for competition and eight Gold and Silver Medals are offered by the Club.

We are also fully alive to the fact that British Birds and Hybrids are at about their best for exhibition purposes in December, and most of us, if not all, have had experience of the favourable conditions and advantages which a place like the Crystal Palace offers to exhibitors and exhibits alike. The whole conditions and arrangements for carrying out all details are and will be in the hands of experienced and past masters in the care, judging, and looking after the exhibits entrusted to our care. The result of your support will greatly encourage those who have taken all responsibility of running this great Show As you see by the minutes that all communications in reference to the Show, questions and queries concerning the same refer to Mr. Tolhurst, of 662, Holloway Road, London, who is your Hon. Show Secretary.

SPECIAL.

No member of the Club will be allowed to compete unless their subscription has been paid.

I have only made 88 receipts out of 170 up till now. All subscriptions must now be paid. Our printing bills are overdue and will save a deal of worry for your Hon. Secretary.

In accordance with rule 20, Mr. Fulljames makes the following resolution, seconded by Mr. Dewhurst: "That the resolution as to voting papers being sent out for the election of Judges be rescinded, and that the support of the Club be dependent only upon the classification and the Judge appointed by Societies applying for the Club's support meeting with the approval of the Committee."

◆

THE AUTUMN SHOW OF THE L. & P. O. S.

The L. & P. O. S. are improving, if slowly. In the classification for Foreign Birds at the forthcoming Autumn Show the word "species" is now used instead of the expression "variety" which has done duty so long. This is good so far as it goes, but in the limit classes, and in the British Bird classes, the committee still keep to their old love, and use "variety" when "species" is meant. It has more than once been pointed out that, while the word variety is the proper word to use in connection with Canaries, it is entirely misused when applied to separate species.

Redpoll is still spelt "Redpole," but this will doubtless be righted in a year or two.

The classification in our sections is a good one: seven classes being provided for Hybrids and twelve for British Birds including one for Pied, Albino, or rare-feathered specimens.

NEW MEMBERS.

Mr. Bright, Ivy Villa, Myrtle Road, Southend-on-Sea.
Mr. Goodall, 12, Yarmouth Road, Watford, Herts.
Mr. J. T. Munro, Dollar, N. B.
Mr. Berry, Beehive Inn, Accrington, Lancs.
Pro. by W. A. Lott.

Mrs. Tipper, The Yews, Taylor Road, King's Heath, B'ham.
Mr. A. Baldry, 70, Pretoria Avenue, Walthamstow.
Pro. by R. J. Howe.

◆

CLASSIFICATION FOR THE GREAT AMALGAMATED SHOW.

HYBRIDS.

Judge: Mr. Vale.

1 Clear Goldfinch and Canary hydrid.
2 Evenly-marked Goldfinch and Canary hybrid.
3 Unevenly-marked Yellow Goldfinch and Canary hybrid.
4 Unevenly-marked Buff Goldfinch and Canary hybrid.
5 Heavily-variegated any variety Canary hybrid.
6 Dark Yellow Goldfinch and Canary hybrid.
7 Dark Buff Goldfinch and Canary hybrid.
8 Dark Linnet and Canary hybrid.
9 Siskin and Canary hybrid.
10 Redpoll or Twite and Canary hybrid.
11 Greenfinch and Canary hybrid, any variety.
12 Any variety of Bullfinch hybrid.
13 Any other variety, Bullfinch cross excepted.

BRITISH BIRDS.

Judge: Mr. Dewar.

1 Greenfinch.
2 Hawfinch.
3 Goldfinch.
4 Siskin.
5 Chaffinch.
6 Bramblefinch.
7 Linnet.
8 Redpoll.
9 Twite.
10 Bullfinch.
11 Bullfinch (hen)
12 Yellow Bunting.
13 Reed Bunting.

Judge: Mr. Frostick.

14 All other species of Bunting or Grosbeak resident or migratory.
15 Song-Thrush.
16 Blackbird.
17 Robin.
18 Skylark.
19 All other species of Lark or Pipit resident or migratory.
20 Starling.
21 Chough, Jay, Magpie, or Jackdaw.
22 Pied, Albino, or rare-feathered specimen of British bird not being a hybrid.
23 All other species of resident insectivorous birds not larger than and including the Grey Wagtail.
24 All other species of resident insectivorous birds larger than the Grey Wagtail.
25 Blackcap or Nightingale.
26 All other species of migratory insectivorous birds not larger than and including the Wheatear.
27 All other species of migratory insectivorous birds larger than the Wheatear.

Judge: Mr. Vale.

28 Pairs of birds matched for hybrid breeding.

Judge: Mr. Rettich.

29 Any species of Continental bird not included in the N. B. B. & M. Club's list.

STANDARDS.

FIELDFARE.

Steadiness	30
Size	10
Quality and condition of feather and clear markings, edges of wings and tail perfect	50
Staging	10
	100

CROSSBILL.

Steadiness	30
Size	10
Quality and condition	20
Markings and colour	20
Wings and tail must be unfrayed	10
Staging	10
	100

BLACKBIRD.

Steadiness	30
Size	10
Eye cere and beak of bright orange	20
Colour dense black, flights and tail perfect	20
Condition	10
Staging	10
	100

ROCK PIPIT.

Steadiness	20
Size	20
Colour, quality of feather, and markings	30
Condition	20
Staging	10
	100

BLACKCAP.

Steadiness	20
Size	10
Cap, the blacker the better	10
Flights and tail should be unfrayed	25
Quality and condition	25
Staging	10
	100

THRUSH.

Steadiness	30
Size	10
Markings clear and distinct, not running into each other, and to run down between the legs	25
Colour, deep olive brown on back, cheeks yellowish streaked with brown, breast and sides buff, broad head	15
Condition	10
Staging	10
	100

THE BIRD MARKET.

The charge is one penny for every four words, including address. All advertisements must be pre-paid, and reach the Editorial Secretary by the 10th of the month.

Reducing Outdoor Aviary: Yellowback Whydah, 30/-; Paradise, Orange Bishop, Common Firefinch, 15/- each.
Crimson-crowned Bishop, Rare Firefinches (*vinacea* and *rufopicta*), Aurora Finch, Grey-headed Sparrow, 20/- each.
White-throated Finch, Rock Sparrow, Nonpareil, Wild Canary, Combassoo, Senegal Turtle, Emerald Dove, Grey Cardinal, White Java, hen Cordon, hen Budgerigar, 10/- each.
Cock Cordon, Bramblefinch, Budgerigar, Saffron, 3/6 each.
Bengali, Silverbill, Blackhead, Nutmeg, Bronze Mannikin, Orange Cheek, St. Helena, Common Weaver, out of colour Bishops, hen Zebrafinch, 3/- each.
Bullfinch, Goldfinch, Linnet, 6/- pair.
Above are cocks in perfect health and full colour unless otherwise stated.

Hyphantornis Weaver, half-colour, 12/6.
Spotted Firefinch (bald), 10/-.
Zebra Waxbill, Common Waxbill (rough), 3/-.
Twite, Redpoll, Greenfinch, hen Canary, 2/6.
Green Avadavat (rough), 5s.

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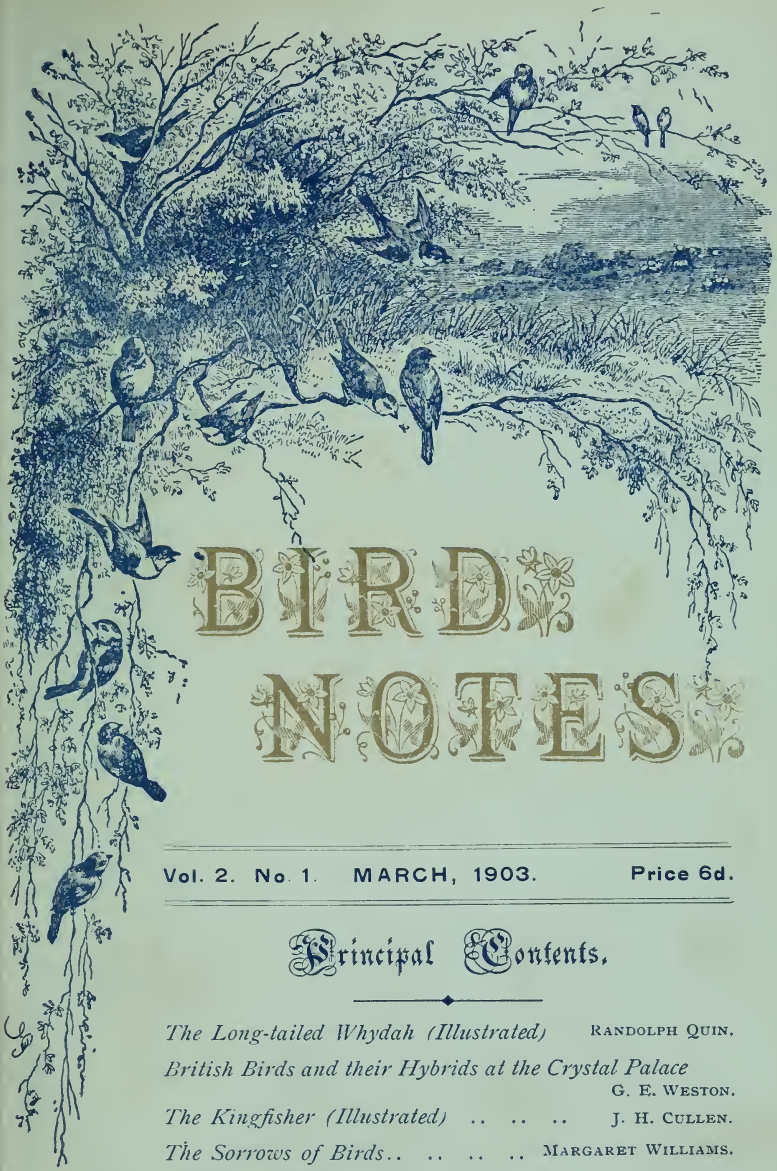

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Vol. 2. No. 1. MARCH, 1903. Price 6d.

Principal Contents.

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British Birds and their Hybrids at the Crystal Palace G. E. WESTON.
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The Sorrows of Birds .. .. MARGARET WILLIAMS.
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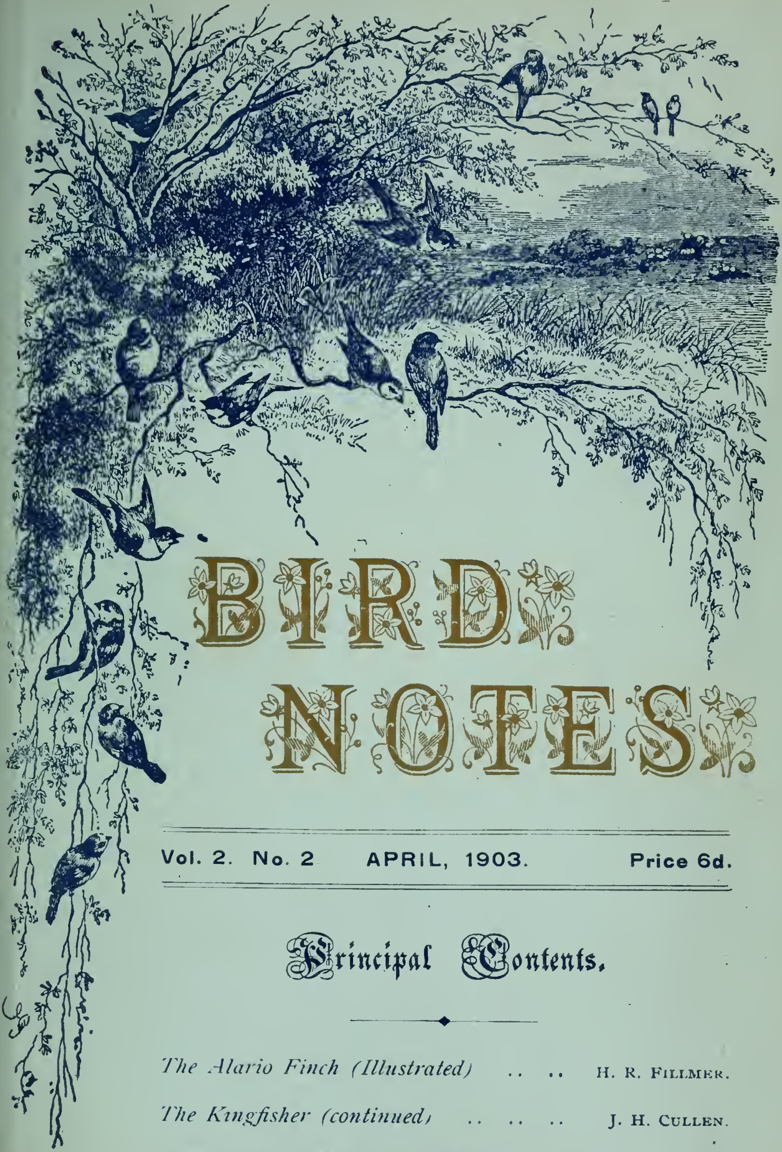

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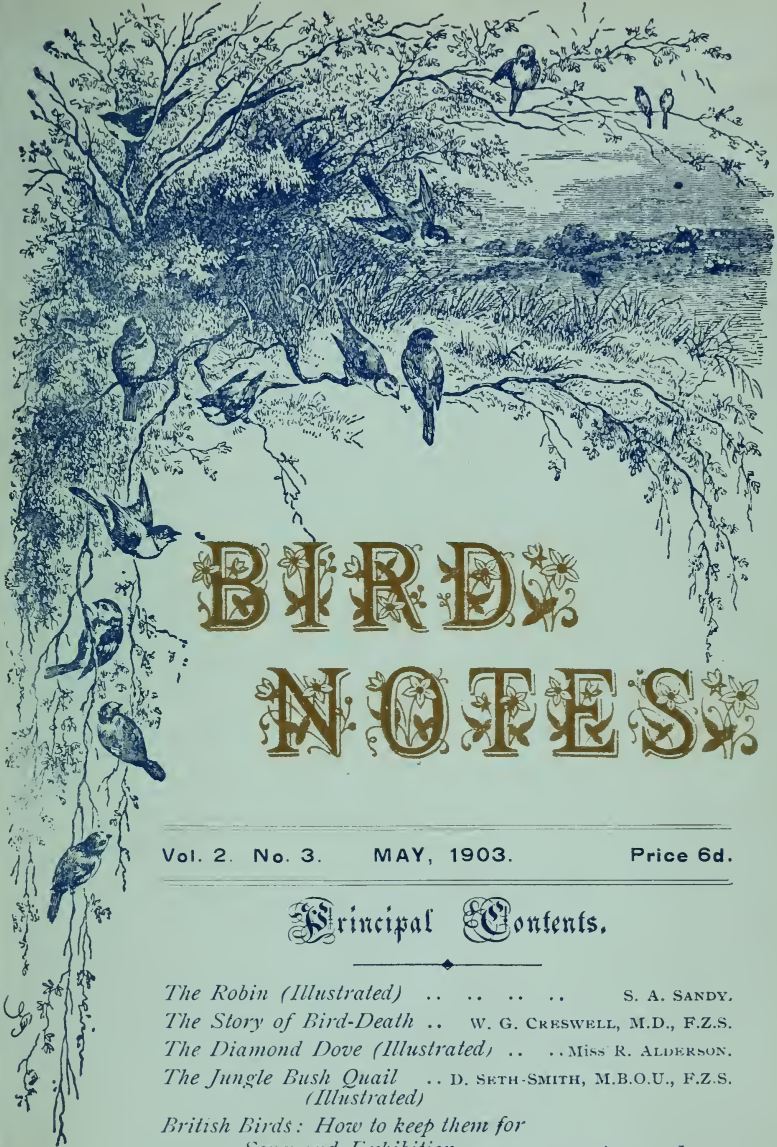

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Parrots and Parrakeets (concluded) .. DR. C. S. SIMPSON.
The Nonpareil Bunting .. .. J. A. SWAN.

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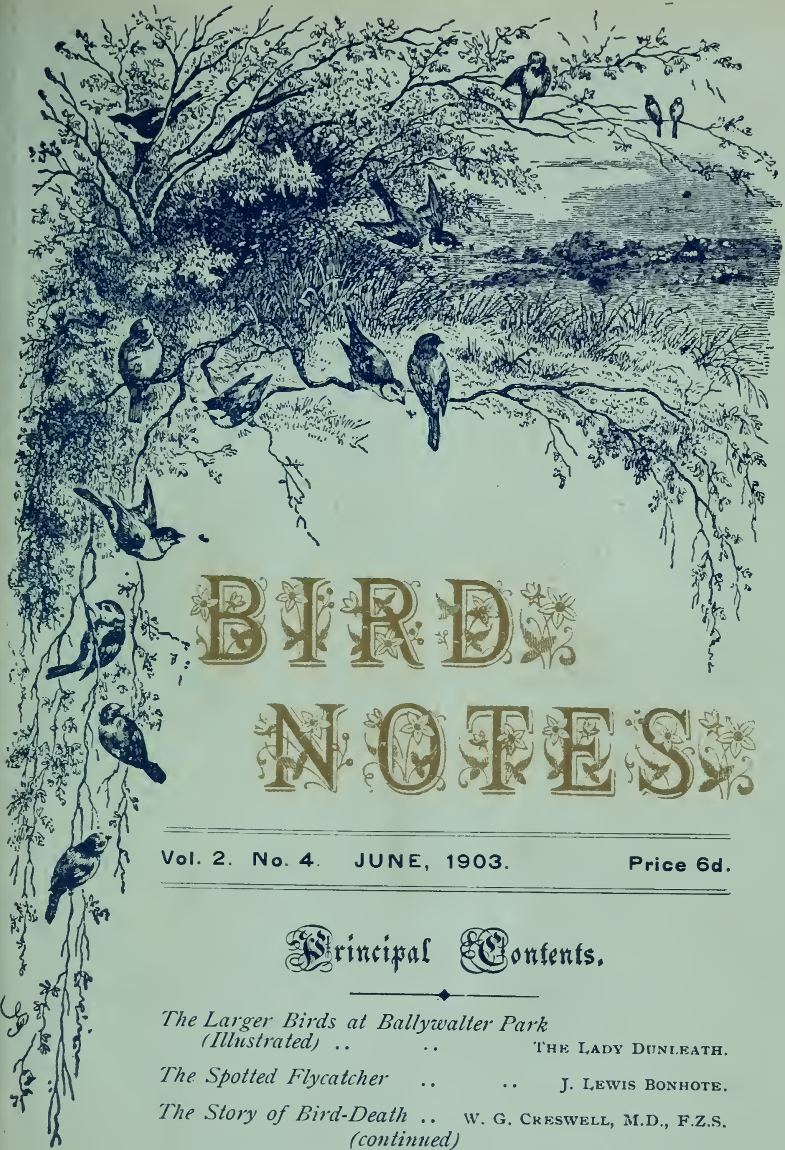

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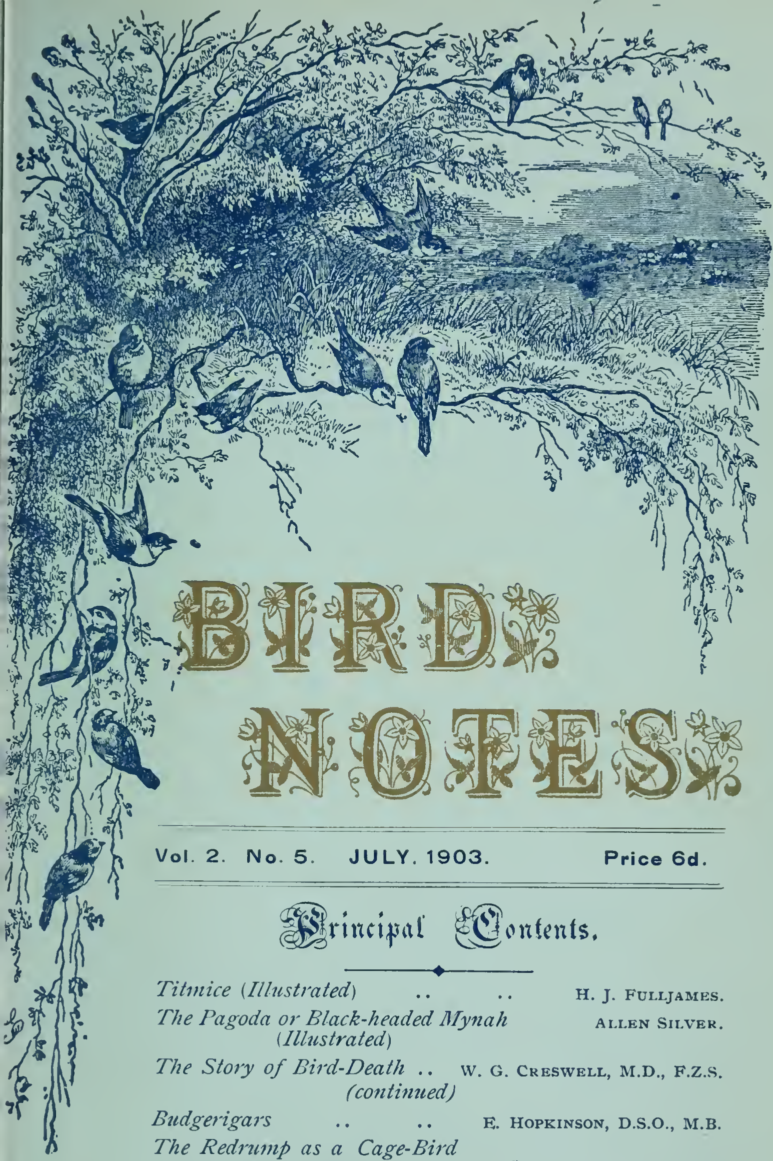

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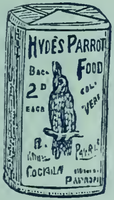
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